Ayurvedic Cure For Common Diseases

Ayurveda is India's own system of medicine which used to be looked down upon till yesterday, but is now again coming into its own, chiefly because of the failure of allopathy in providing cures without serious after-effects. Here is a book that presents the theory and cures of Ayurveda in a simple manner and style but in modern terminology, and in the process deals with as many diseases as possible, from common cold to diabetes, hysteria, small pox and cholera. In all about 100 diseases and their treatment alongwith dieting and other regimen have been discussed in this book.

Dr. N. Anjneya Murthy belongs to a family where Ayurveda has been practised for the last three generations. He did his B.Sc. from St. Joseph's College, Bangalore, and B.S.A.M. (Bachelor of Ayurvedic Medicine and Surgery) from Karnataka University, in which he held the First Rank. He then did his M.D. in Ayurveda from Gujarat Ayurvedic University, Jamnagar, and worked as Asst. Professor of Nidana Chikitsa at Shri B.H. Ayurvedic College, Lodhra, Gujarat, for several years. He is presently a Senior Physician in the Ayurvedic Section of the famous Moolchand Kharaitiram Hospital, New Delhi.

D.P. Pandey is a researcher whose interest in medicine has led him to work on a number of books, in collaboration with practising doctors, vaids and hakims of repute, on a variety of subjects directed to the well-being of the common man. The present work is a similar collaboration effort to present Ayurvedic cures for common diseases in modern idiom.

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Preface

Ayurveda—the science of life—has its roots in antiquity and has been practised in our country for centuries. The incursions of Western culture and education put it in eclipse, albeit temporarily, and modern (so-called, let it be said) medicine got the pride of place when the White invaders followed each other into our land. English and its teaching brought British ways of thinking and those educated according to Western standards tended to forget our own heritage. Practitioners of Ayurveda were called quacks and loss of governmental and even social recognition (at least among the elite, also so-called) put this ancient science in the shade. It was only after India became free that we started thinking of reviving this ancient science.

Modern medicine's preoccupation with germs as causative of diseases and its expertise in killing off those germs has given rise to a serious problem. Each new medicine has created new problems, in that alongwith the germs supposed to have caused morbidity it also kills the beneficial bacteria that help the human body to maintain its balance. If you happen to look at medical literature that the pharmaceutical companies publish, you will find that hardly any medicine has no harmful side-effects. Antibiotic drugs are generally administered by the allopaths alongwith certain vitamins, because they tend to kill off the bacteria which produce those vitamins in the body. Even so, most practitioners of modern medicine use antibiotics rather indiscriminately creating complications for their patients. Homoeo-

paths, naturopaths and of course, Ayurvedic physicians come across myriads of cases which had been complicated because of indiscriminate use of allopathic drugs forcing the patients to take to alternative systems of medicine.

It is because of these factors that the educated people who used to look down their noses upon Ayurvedic physicians seek their help when allopathy fails to relieve their condition. The present work is intended to inform the general reader about Ayurveda and its efficacy in treating diseases. The method of treatment of the subject may cause the lovers of Ayurveda to frown, since the description of the diseases is two-fold; the modern medical terms are freely used, but at the same time the causative factors are treated according to Ayurvedic doctrine. In so far as the drugs used for the treatment of various diseases are concerned, home remedies are also mentioned alongwith standard Ayurvedic preparations manufactured by some of the Ayurvedic drug houses. Procedures for the manufacture of drugs have not been mentioned since they are a better subject for professional treatises. This is a book for laymen, written by a two-some, one of whom is a practising Ayurvedic physician and the other a layman.

Most of the common diseases are treated at some length and the authors are sure that if a reader follows the regimen indicated alongwith the medicines which are readily available, he will be benefited. Care must, however, be taken to be sure about the malady from which one suffers. Even though Ayurvedic remedies do not as a rule have any harmful side-effects, they have their own properties and if a malady is caused by the aggravation of Pitta the remedy has to be Pittahara; any other drug would at least complicate the case, if not exacerbate it.

—*The Authors*

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Bhagwan Dhanwantari
God of AyurVeda

1

WHAT IS AYURVEDA

हिताहितं सुखं दुखमायुस्तस्य हिताहितं
मानं च तच्च यत्रोक्तमायुर्वेदः स उच्यते ।
—चरक संहिता 1 : 81

Ayurveda is the science which treats of what is advantageous and what is harmful for the body and also the happy and unhappy states of life. It describes what is good and what is bad for human life, its measurement and other related matters.

Etymologically Ayurveda is the science of life, but it is more appropriate to call it the science of living. It is part of the Vedas; in itself it is one of the *upa* or supplementary Vedas, being part of the Atharvaveda.

It is not only the knowledge of life, but essentially the knowledge of healthy living, having as much concern with the normal as with the abnormal or pathological. Essentially a science of healing, it concentrates on the techniques of a healthy normal life.

The universe, according to Indian thinking, is composed of the five basic elements, the Panch Mahabhootas, namely: Prithvi, Aap, Teja, Vayu and Akash or earth, water, fire, ether and air. The human body being similarly constituted, there is a fundamental harmony between the universe and man, a healthy balance between the microcosm and the macrocosm.

The Theory of Tridosha

Ayurveda believes in the theory of what is known as the Tridoshas: Vata, Pitta and Kapha. Vata is a combination of the two elements of the universe, namely, air and ether (Akash), Pitta an amalgam of fire and earth (Teja) and Kapha the combination of ether and water. According to this theory, the Tridoshas are in balance in the human body and when that balance is disturbed, a disease is born.

According to this ancient system of medicine, there are seven different types of constitutions, or *deha prakritis,* which again are based on the Tridoshas. The predominance of one particular dosha decides the constitution a person has. If there is excess of Vata the constitution becomes *vatiya*, the predominance of Pitta gives rise to a *pittiya* constitution and those who have too much of Kapha get a *shleshma* constitution. The remaining four constitutions occur on the predominance of more than one dosha. The bodily constitution remains unchanged throughout a man's life.

Each different constitution has peculiar dietary and other habits and its response to drugs is also peculiar to it. Ayurvedic practitioners will take into consideration the bodily constitution of the patient before prescribing for him because a medicine which suits a *vatiya* constitution will not help a *shleshma* patient.

True medicine, according to Ayurveda, is one which cures the disease without giving rise to side reactions or other diseases. It is in this aspect that Ayurveda has a definite superiority over other systems of medicine, particularly over what is known as the modern system of medicine with all its gadgets and diagnostic paraphernalia. Modern medicine is too much concerned with germs and viruses as causative factors. In an effort to destroy the germs which are supposed to have caused

the disorder, it sometimes aggravates the condition by producing a supplementary disorder, euphemistically called side-reactions. There are umpteen cases of over-drugging or wrong medication in allopathy which give rise to diseases more serious than the ones the practitioner sought to cure in the first instance. Ayurveda does not treat a disorder in isolation. It seeks to study the complete picture of the malady, because only then can the balance be restored which is at the root of good health and freedom from disease.

The Importance of Diet

Health, according to Ayurveda, is the natural state of all the three aspects of a human being—body, mind and the soul (*indriyas*, *mana* and *atma*). When the natural state comes in contact with unhappiness (*dukhasamayoga*) diseases result. The main object of an Ayurvedic practitioner is to restore the balance in times of sickness and to maintain it for a healthy life. That is why *pathya* (regimen of diet) is given as much importance as drugs to cure the various ailments.

Ayurveda tries to determine which of the three doshas—Vata, Pitta and Kapha—is responsible for the ill-health of the patient. The name of the disease does not matter: what matters is the basic cause of the malady. The age of the patient, the climate in which he lives, and his bodily constitution are all taken into account at the time of diagnosis. Touch, inspection and interrogation—rather than the complicated clinical and pathological tests so popular among the allopaths —are the main tools of diagnosis. The aim is to study the complete picture of the malady; its symptoms, the constitution of the patient and even the season of the year are taken into account. The disease is not studied in isolation, nor is a single remedy prescribed in all

EATING WELL
AND KEEPING
CLEAN
ARE THE
BEST
GUARANTEES
OF GOOD
HEALTH



cases of the disorder in different persons

Along with the medicine given is the prescription of diet—what foods would aid recovery and what would hamper it or complicate matters. The regimen of diet is as important as the remedies prescribed since the former helps to restore the balance as much as the latter.

The Germ Theory and Ayurveda

Even though Ayurveda does not deny the existence of germs or their role in morbidity it does not give them the pride of place in the aetiology of physical disorders. And talking of germs, even modern medicine

has, after much research and experimentation, come to realise that it is the predisposition of an individual which is more important than the germs or viruses as causative factors of disease. If that was not so, all persons exposed to a particular germ would come down with disease. But some resist the germs and viruses better than others. Why? The answer lies in the study of Ayurveda. If proof of this observation is needed, it can be found in the records of certain experiments conducted by modern medicine. A team researching cancer a few years ago introduced cancerous cells from terminal cases into the bodies of healthy individuals and found that not all fell prey to the disease. Louis Pasteur, it may be mentioned, gave less importance to the seed than the soil but his followers have forgotten this teaching of his. That should show that germs are not the only causative factors as modern medicine believes and Ayurveda does not.

Even though references to principles of medicine are found in almost all the Vedas, the main body of Ayurveda is found in the fourth of the Vedas, the Atharvaveda. It contains not only the description of various diseases—both physical and mental—but also the aetiology of the disease Tradition has it that Brahma, the creator, imparted the knowledge of Ayurveda to Prajapati Daksha and from him the knowledge descended to two Ashwinikumaras and then to Lord Indra. He sent Dhanwantari to the earth to impart the knowledge to others. His student, Sushruta, wrote his famous compendium on surgery, the *Sushruta Samhita*. And to Charaka goes the credit of the famous treatise on general medicine, the *Charaka Samhita.*

Ayurveda has eight distinct branches: (i) general medicine; (ii) major surgery; (iii) ear, nose, throat, eye and mouth diseases; (iv) psychiatry; (v) midwifery and

pediatrics; (vi) toxicology; (vii) rejuvenation and tonics; and (viii) aphrodiasics. It is because of these eight branches that Ayurveda is sometimes known as the Asthanga Ayurveda.

The Ayurvedic system is the mainstay of the majority of our population. Practitioners of modern medicine and hospitals and dispensaries being very rare in the rural areas, the local vaids are the only people who prescribe for the villagers when they fall sick. The so-called elite may have lost the respect for this medicine because of their western ways and education, but those wh o are familiar with the Indian tradition and culture know that Ayurveda is the answer to our health problems. Not only because it is cheap, but also because it gives rise to less complications than does allopathy. In chronic cases, one often hears the allopath advising the patient to 'learn to live with the malady' but such is not the case with Ayurveda. But now there is a reversal in this trend and people are returning to Ayurveda and other indigenous medicines. Interest in western countries in this system of medicine is growing at a very fast rate. The late Pt. Shiv Sharma has done quite a lot towards its spread in the West, including Australia.

We shall now discuss in outline the basic concepts of Ayurveda and the diseases along with their remedies, diet and regimen, etc.

Diagnosis

The practitioners of Ayurveda may not use the sphygmomanometer to measure the blood pressure and the stethoscope to listen to the heart action, but it does not mean that their methods of examination of the patient or the diagnosis of the disease are not scientific. On the contrary, diagnosis in Ayurveda is

more detailed and, therefore, more accurate. The texts lay down the various techniques for diagnosing the various disorders. As Charaka said:

> The intelligent physician should endeavour to investigate correctly each disease by the use of three means, namely, authoritative instruction, direct observation and inference.

Investigation is carried out in three stages: (i) interrogation of the patient, (ii) objective examination, and (iii) examination by inference or indirect method. Firstly, the evaluation of the patient as a whole is made in terms of his bodily constitution, somatic make-up or tone of the system, compactness, proportions, psychic make up, gastric capacity, capacity for exercise and age. The second process is to assess the progress of the disease, special aetiological factors, curability or incurability and thirdly, an evaluation of his expectancy is made in view of the prognosis.

After the case history has been taken and the physician knows what type of constitution the patient has and what type of illness his family have ever suffered from, he goes on to the next stage of the examination and that is the examination of nails, eyes, eye lashes, eye brows, nose, teeth, lips, hands, feet, hair, pupils, urine, faeces, shadow, reflection and lustre. The entire body of the patient is then palpated to find out the normal and the abnormal condition. The physician tries to find out whether a particular organ or the entire system is cold or hot, moist or dry, light or heavy, sensitive or insensitive, rough or smooth, rigid or loose, depressed or elevated. Body odours are paid special attention to. Examination with the ears includes listening to the various sounds emanating from the affected

organs.

The next stage is the inference which the physician can reach on the basis of his interrogation of the patient and the examination which he has completed. He can then conclude which particular dosha is responsible for the state of morbidity in which he found his patient. Ayurvedic texts describe in detail the symptoms which arise from the decrease or increase of the three doshas. As Charak has laid down in his *Samhita*:

> The Tridoshas when increased manifest their characteristic symptoms in proportion to the intensity of their morbidity. When decreased they cease to manifest their characteristic qualities and when normal they perform the normal functions of the body.

After determining the effects in the equilibrium of the Tridoshas, the Ayurvedist goes deeper still to find out the type of imbalance and describes the three phases, namely, waning, aggravating, and expanding. The particular season, the country, and other outside factors are also considered. For example, no calex is administered during the rainy season except where the life of the patient is in danger.

Practitioners of Ayurveda are keen observers. They also study the state of the body fluids, blood, flesh, fat, bone, marrow, semen and vital essence or Oja (which, incidentally, is known as the vital force in the naturopathic system of medicine). They also try to find out whether the disease is curable or not. As Charak has pointed out:

> The physician who knows the differential diagnosis between the curable and the incurable disease con-

ditions and begins treatment with full knowledge of the case and in time, obtains success for his effort without fail . . .

Further:

The person who has got normal equilibrium of Tridoshas the seven body constituents, and the three body secretions as well as normal appetite and one who is more joyous in body, mind and spirit is really healthy and the person otherwise is called unhealthy.

In addition to the investigative procedures mentioned above, an eightfold examination of the pulse of the patient is made. The practice of examining the stools, the urine, sputum, skin, voice, tongue, etc., has been in extensive practice for the last three to four hundred years. The art of reading the pulse has been developed to such an extent that many practitioners are able to correctly diagnose the disease merely by feeling the pulse of the patient for a few seconds. The rapidity and the volume of the pulse would indicate the particular doshas from which the patient is suffering. *Bhava Prakash* and *Sarangadhara Samhita* written within the last six centuries contain details of pulse examination. Pressure is applied to the radial artery below the thumb with three fingers to see whether it is the Vata, Pitta or Kapha which is responsible for the state of morbidity. Detailed description has been given of the pulse under various conditions of morbidity.

In addition to the above factors, Ayurveda pays attention to the state of the digestion. The condition of the gastric juices tells the physician what state the

patient is in. Attention is also paid to the condition in which the various channels (*srotas*) are, because *srotarodha* (blockade of the channels) gives rise to disease. For example, the blockade of the bile ducts would result in jaundice. Scanty passage of urine will give rise to abnormal proportion of uric acid in the blood.

It is only when a detailed diagnosis has been made that the Ayurveda practitioner ventures to start the treatment. And when the diagnosis is correct, the remedy would invariably be effective.

Factors Responsible for Disease

Disease, according to Ayurveda, as we have already noted, is the lack of balance among the three somatic doshas; Vata, Pitta and Kapha.

The normal function of Vata or *vayu* is to sustain the body and that is why it is the originator of every kind of action of the body. It has been called the Tantra-Yantra Dhara, in other words, the maintainer of the human machinery, keeping it in shape. Vayu occupies the pride of place in the three doshas. Just as the wind controls the direction of the clouds, so does Vayu control the functioning of Pitta and Kapha.

It is of five kinds: *prana*, *udana*, *vyana*, *samana* and *apana*. Prana Vayu is responsible for breathing and the swallowing of food and also for the functioning of the heart and the parts of the body directly connected with it. Its normal function is to maintain the functioning of the heart, the mind, the senses, the intellect, the arteries, the veins and the nerves. Udana Vayu is responsible for the production of the various sounds and speech, the action and the efforts to keep up the strength of the body and especially for giving strength to the mind, memory and the intellect. Samana Vayu controls the flow of liquids in the body. It helps the

action of the digestive enzymes. It separates the essences vital for the nourishment of the body and sends the wastes to the large intestines. Apana Vayu is situated in the lower part of the digestive tract, the urinary system, and the reproductory organs. Its function is to hold the faeces, urine, menses and semen upto a normal period and then to expel them through the various orifices of the body. This vayu is one of the most important factors in the body since its normal functioning keeps a person healthy. In an abnormal state it moves upwards and depresses the diaphram giving rise to a sense of acute discomfort. Vyana Vayu flows in the whole body and carries the food juice and blood throughout the body. It helps the secretion of perspiration and controls the opening and closing of the eye lids, and other movements of the body.

Like the Vayus, Pittas are also of five kinds: *pachak*, *ranjaka*, *sadhaka*, *alochaka* and *bhrajaka*. The first, i.e., the Pachaka Pitta is mainly responsible for the digestion of food. It divides the food juice into the fine and waste parts and then helps the other four types of pittas to function normally in the body. The Ranjaka Pitta, as the very name indicates, gives colour to the food juice when it goes from the stomach to the liver. Sadhaka Pitta has its seat in the heart and is the finest of all the pittas. It helps in the normal functioning of the intellect and memory. The Alochaka Pitta is responsible for the maintenance of normal vision in the eyes. The Bhrajaka Pitta is situated in the skin of the body and is responsible for the normal colour in the skin.

Like the Vayus and the Pittas, the Kaphas are also of five types. The first of these is Kledaka, which as its name indicates, is responsible for moistening the food in

the stomach. It nourishes the other kaphas by its special humid properties. The second Kapha, the Avalambaka, has a seat in the thorax and protects the heart from excessive heat by its cooling influence and gives a special power to the heart. The Bodhaka Kapha moistens any substance when it comes in contact with the tongue and helps to know the taste of substances ingested. Its seat extends from the root of the tongue to the throat. It plays a part in increasing appetite. The fourth Kapha, the Tarpaka, cools the organs of the senses of sight and hearing. The Shleshaka Kapha is situated in the joints of the body and maintains them in good order so that the various parts of the body remain firm but are also free to move.

In addition to the doshas, there are the elements known as Agnis. The principal action of Agni is to help digestion with the aid of Vayu. Of Agnis, there are thirteen types: seven *dhatu agnis* (pertaining to the seven *dhatus* of the body), five *bhuta agnis* (pertaining to the five *bhutas* or elements) and one *jatharagni* (the digestive fire in the stomach). The last named, Jatharagni, contained in the Pachaka Pitta, is the root of all Agnis in the body. Its derangement or loss leads to disease.

The six factors which help digestion—the mainstay of health—are: (i) Pachaka Pitta or Agni; (ii) Samana Vayu; (iii) moisture, (iv) Kledaka Kapha; (v) time; and (vi) a proper combination of the first five. Our food has the property of taste or *rasa* which is of six types: sweet, sour, salty, pungent, bitter, astringent. The food is subjected to the action of the Bodhaka and the Kledaka kaphas in the mouth and the upper part of the stomach. The sweet digestive action (*madhura vipaka*) is followed by the action of the Pitta (*amla vipaka*) when the Agni dries up the waste product which

goes into the large intestine.

The theory of rasas occupies a central place in the Ayurvedic materia medica, the drugs being described according to the rasas predominant in them. According to this theory, the foods that we take can be divided into four categories; (i) *dhanya* (cereals); (ii) vegetables; (iii) fruits; and (iv) flesh. The fundamental principle of dietetics and drugs is the rasa theory.

The human body (like other animate beings) is composed of seven constituents or *dhatus* according to Ayurveda: (i) *rasa* (the humours of the body); (ii) *rakta* or blood; (iii) *mamsa* or flesh; (iv) *meda* or fat; (v) *asthi* or bones; (vi) *majja* or bone-marrow; and (vii) *shukra* or semen.

In addition to the doshas (three in number), and the *dhatus* enumerated above, *malas* (secretions) are the other constituent of the body. The chief malas are *mutra* (urine), *shakrit* (faeces) and *sweda* (perspiration). The malas are the waste products of the body which are ejected after the process of digestion has been completed. The malas are the bye-products of the various dhatus present in the body, e.g., kapha is the bye-product of rasa dhatu. Likewise, the other malas are: (i) *pitta*; (ii) *mutra*; (iii) *sweda* or sweat; (iv) *purisha-sneha* or faecal fat; (v) *mala* or *purisha* (faeces); *prajanan malas* or secretion of the genitalia; (vii) and *kha malas* (secretions of the various orifices of the body, like the ear, the nose, the mouth, etc.)

According to Ayurveda, the human body in health has a fine balance of the tridoshas, the dhatus and the malas. The tridoshas have the pride of place and then come the dhatus and the malas. Ill-health or disease is the result of the disturbance in the balance among them. Here it would be of advantage to point out that the doshas are not defects as some translators of Ayur-

vedic texts have erroneously assumed. As a matter of fact when we speak of the doshas as the causative factors of disease, it would not be wrong to refer to them as dhatus (or constituents of the body) an imbala-nce among which gives rise to disease.

2

DISEASES OF THE DIGESTIVE SYSTEM

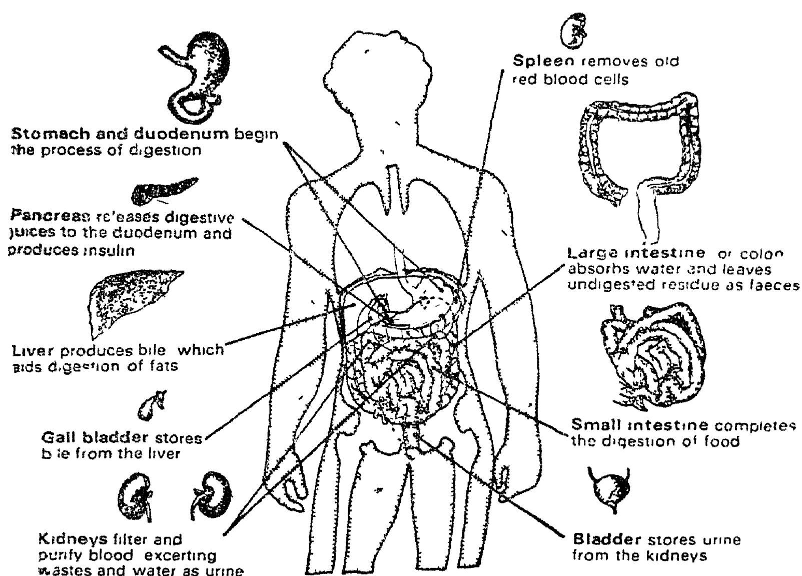
आयुर्वर्णोबलं स्वास्थ्यमुत्साहोपचयौ प्रभा
ओजस्तेजोऽग्नयः प्राणश्चोक्ता देहाग्निहेतुका
—चरक संहिता 15: 3

The life span, complexion, vitality, good health, zest, plumpness, glow, vital essence, lustre, heat and the life breath are maintained because of *agni*. Its maintenance is essential for good health.

The Process of Digestion

Before entering upon the subject of digestive disorders we should examine the process of digestion; only then we can properly understand the disorders and their treatment

The stomach is one of the most vital organs of the body, being one of the five so categorised by the Unani system of medicine, the other being the heart, the lungs, the kidneys and the brain. The stomach being the key to assimilation of food which nourishes the body is perhaps the most vital part of the human body. The stomach not only stores food during the process of digestion, but also makes it more permeable through the juices it exudes. The interior of the stomach is covered with minute glands from which the gastric juice exudes. The two ferments, pepsin and rennin, contained in the gastric juice help to break down the food into smaller molecules. The hydrochloric acid in the stomach aids the action of the ferments. The



moment food enters the stomach it starts a churning motion to mix the food with the gastric juices so that it becomes soluble. Light foods like milk and fatless cereals or fruits take much less time to be digested than heavy foods like fried substances and wine.

HOW YOUR FOOD IS DIGESTED

The softened food goes from the stomach into the intestines and is exposed to the action of the four elements: (1) bile; (2) pancreatic juice; (3) intestinal juices; and (4) bacteria. These elements break down the food into the various substances which are vital for the development of the body. It is only when the food has passed from the bowels that the process of digestion is completed and the process of absorption

and assimilation have started. That is how the human body replaces the energy that has been expended: the extra food that has been assimilated contributes to the layers of fat over the various parts.

Ayurveda, however, does not take such a mechanical view of the human body. The masters of Ayurveda have recognised thirteen types of Agnis, of which the most important is the Jatharagni, the others being the seven dhatu agnis and five bhuta agnis. The Jatharagni, contained in the Pachaka Pitta, is the root of all the Agnis of the body. The diminution of Jatharagni gives rise to most disorders of the stomach, particularly anoraxia (loss of appetite) and dyspepeia. In addition to this agni which is the sheet anchor of digestion, there are six factors which help digestion: (1) Pachaka Pitta; (2) Samana Vayu; (3) moisture; (4) Kledaka Kapha; (5) time; and (6) a proper combination of the first five. Vayu pulls down the food into the stomach and brings it near the agni and also inflames the agni; moisture breaks up the compactness of the food; Kapha softens the food; time is required for completing the process of digestion; and a combination of these is vital for completing the process started by the ingestion of food.

We shall now deal with the disorders of the digestive system in the order of their frequency.

CONSTIPATION

Symptoms: The most common disorder is perhaps constipation. Those living in the cities and given to an easy, sedate life and rich food are more prone to it than others. The main symptom of this disorder is the urge to void the stools but the inability to do so. If it continues for some time, it may lead to a feeling of

heaviness and later headaches, lethargy, loss of appetite and total apathy. The inability of the intestines to expel the waste matter leads to putrefaction and flatulence. Acute constipation continuing over a long period can lead to distension of the stomach and severe discomfort.

Treatment: Change of food habits is a better way to deal with constipation than drugs of any kinds. Since the disorder is born out of the habit of taking heavily spiced, fatty foods and too refined cereals, the first step in dealing with constipation is to advise the patient to take light foods. Milk, fruit juices and boiled vegetables and total abstinence from fats and refined foods, is the first step towards the treatment of constipation. The patient should be advised to take sufficient amounts of liquids—water, milk, etc.—which will deal with dryness of the intestines to which faeces have the tendency to adhere.

In the case of children suffering from an obstinate constipation, a suppository made of macerated leaves of Harita Manjari (*acalypha indica*) should be introduced into the rectum. An alternative is the suppository made of the stalk of betel leaf coated with castor oil. Or, a poultice made of the leaves of Kidamari (*aritolochia bracteata*) should be applied to the abdomen of the child.

The other remedies which tend to relieve constipation are:

(1) Powder of Madhuka (liquorice root) taken with *gur* and water; (2) decoction of Akashvel (dodder); (3) the pulp of the roots of Arni (*clerodendrum phlomidia*) taken with ghee; (4) Isabagol (flea seed)—two heaped tablespoons—taken with milk or water; (5) castor oil seed in small doses; (6) Senna, one part

and Harada half a part, finely powdered taken in one dram doses thrice daily.

Chronic constipation can be best dealt with by the pills made of the following ingredients:

Rose buds	5 parts
Senna leaves	4 Parts
Pulp of Amaltas	3 parts
Harad	5 parts

Alternatively,

Nishottar	2 parts
Pipli	4 parts
Harada	5 parts
Gur	(equal to the quantity of all the substances enumerated above)

If the constipation is attended by dry, hard and lumpy stools, Jhohar (*euphorbia nerifolia*) should be cooked as a pot herb and eaten before meals. Harada should be fried in ghee or castor oil and the powder made out of it should be taken with black salt.

Standard preparations advised in the case of patients suffering from constipation are: Swadishta Virechan, Lasuna Kshira and Avipittakar Churna.

A patient suffering from chronic constipation should be advised to avoid starchy foods and to take leafy vegetables like spinach, cabbage, *chulai*, stalk of mustard (*sarson ka saag*) and fruits like musk melon, papaya and mangoes. He should also take long walks and exercise which will tone up his stomach muscles. A glass of water taken first thing in the morning also helps relieve costiveness.

DYSPEPSIA

Causes and Symptoms: Dyspepsia or indigestion is the term applied to difficulty associated with digestion of food. It may be attended with pain in the region of the stomach, flatulence (formation of wind), eructations (belching), a foul taste in the mouth, heart-burn and a general feeling of discomfort. There is also a loss of appetite in some cases of dyspepsia. It may be the offshoot of many other diseases. Overeating or eating at the wrong time or the wrong type of food can also result in indigestion.

The general term applied to the symptoms associated with dyspepsia in Ayurveda is Agnimandya (lowering of the intensity of agnis, particularly, Jatharagni, which aids digestion). The aggravation of the doshas, Vata, Pitta and Kapha leads to this disease. Excess of Vata leads to pain in the stomach, that of Pitta causes a burning sensation and if Kapha is vitiated, there is nausea and vomiting.

Treatment: As in constipation, it is easier to prevent dyspepsia than to cure it, if one follows the simple rules enunciated by Ayurveda. Fresh and hot food should be taken in pleasant surroundings. It should be taken only when the previous meal has been properly digested. Foods which do not agree with each other should be avoided. One should never eat in a hurry or when one is worried or angry. Emotions like anger and worry, the tensions of modern life, if allowed to have a free play will inevitably lead to dyspepsia. One should avoid eating if there is a heaviness present. The quantity of food taken should be enough to assuage one's hunger without producing a sense of fullness.

The quantity of food varies from individual to individual. A cardinal rule to follow in the matter of food is to *avoid excess*. You must have observed that some people turn into gluttons whereas others—though their number is limited—subsist on very little food. Sleep and food are really matters of habit—they can be increased or decreased within certain limits without in any way impairing your health. The human body is a wonderful machine: it adjusts itself to circumstances very quickly, much more quickly than the human mind does. Excess of food not only puts too much of pressure on the digestive system, it is also thrown out by the body in an indigested or incompletely digested form. The quantity of food needed to nourish the body also varies according to the seasons. In summer, you need more of liquids than of solid foods whereas in winter it is the reverse. In winter, unctuous, sour and saline foods, flesh of birds and aquatic animals, wines and strong alcoholic beverages may be taken without any harm, but in summer cooling drinks, milk, rice and flesh of animals dwelling in forests are the proper foods. Wines should be avoided in summer, except when they are diluted with water.

A home remedy for chronic indigestion is to have the patient chew a piece of ginger (about 15 grains) with powder of rock salt before meals. The major remedy in Ayurveda for dyspepsia is of course the Hingvashtaka Churna, the major ingredients of which are Hing (asafoetida), Shunthi (*zingiber officinale*), Pippali (*piper longum*), *Maricha* (*piper nigrum*), Ajamoda (*carum roxburghianum*), Jiraka (*cuminum cyminum*) and black cummin seed.

The remedy acts best when taken with butter milk after food. Or, it may be taken with the first morsel of food. It may also be mixed with an equal quantity of

ghee (one teaspoon) and taken twice daily. In cases of pain accompanying dyspepsia, the cardinal remedy is Mahashanka Vati, two tablets given thrice daily with warm water.

Other remcdies of choice are: (1) Ajirnari Rasa 3/4 gm. together with Shatapatriyadi Churna—2 gm. given with warm water, in the morning and evening; (2) Draksharishta (20 ml.) may be given twice daily after meals with water; (3) Haritaki Churna (3 gms.) raisins (3 gms.) and sugar (6 gms.) may be administered the last thing at night with water; (4) Agnimukha Lavana and Narayan Churna (one gm. each) may be given thrice daily with warm water; (5) Lashunadi Vati, Samudradi Churna and Sarjikasatva (one gm. each) may be given twice daily after meals with warm water.

DIARRHOEA

Causes and Symptoms: Diarrhoea, or looseness of the bowels, resulting in copious, watery or unformed stools, known as Atisar in Ayurveda, is a serious condition depending on its origin. It may be due to the incapacity of the digestive system to deal with the heavy, fatty foods, ingestion of poisonous substances, certain harmful bacteria, as in cholera, typhoid fever, when the patient has not taken care to have a proper diet, ulceration of the intestines in tuberculosis or some diseases of the liver, kidneys, lungs or the heart.

Diarrhoea may also be caused by sudden fright, a shock of death of a loved one or extreme worry. Such a disorder is easily cured: the moment the causative worry or shock wears off, it heals automatically without benefit of any drugs. But in other cases, a wise physician tries to ascertain the cause of the malady and treats it accordingly. Other causes of diarrhoea include:

change of climate, as with mountaineers when they reach heights, change of season, as in spring or autumn and change of diet to which a person is habituated.

Ayurveda recognises many varieties of diarrhoea, the chief among them being six: (1) that caused by Vata; (2) the one caused by Pitta; (3) the one caused by Kapha; (4) diarrohea caused by a combination of all the three doshas; (5) diarrhoea caused by sudden fright; and (6) Aamaja Atisar caused by indigestion or amadosha—Charaka has categorised it as one arising from sudden fright. Sushruta, it should be mentioned, has treated the diarrohea caused by fright as caused by Vata dosha.

Infantile diarrhoea falls in a separate category and we shall deal with it first. Contaminated milk or infection in the alimentary canal may cause diarrhoea in infants and if an infant is breastfed, the digestive disorders of the mother can be transmitted to the child. Infantile diarrhoea may be accompanied by vomiting or griping pain in the stomach. It is a common disorder at the time of teething The child refuses milk and is given to crying and cannot sleep. Care should be taken in such a condition because continued diarrhoea may lead to dehydration and emaciation.

Treatment: The 'gripe waters' generally marketed for infants contain carminatives which are harmful if administered for a long time. Ayurvedic treatment for the disorder consists in administering two grains of a paste made out of the root of the Musta (*cyperus rotundus*) plant, three to four times in the day. In powdered form, one grain of the substance mixed with a teaspoonful of honey, should be given three to four times a day. In case the stools are watery and there is vomiting present, one grain of powder of the seed of

Jaiphal (nutmeg) should be given. The essential oil in the nutmeg relieves the griping plan of the infant instantly.

A compound Ayurvedic preparation Gorochanadi Vatika is of particular use in this condition. A half-grain pill of this medicine is recommended four times a day till the malady is relieved. The medicine helps relieve fever, cough and cold of the infants too. Another remedy is Balachaturbhadra Churna (2-3 grains) with honey.

The diet of the infant suffering from infantile diarrhoea should consist of milk with less fat. Cow's milk and failing that goat's milk should be given. In case of non-availability of cow's or goat's milk, any milk that is available should be diluted with water. As a precaution, one grain of Musta powder should be boiled with the milk before giving it to the child.

In some cases infantile diarrhoea starts because the child may be feeding on the milk of a woman who is pregnant. In such a case he suffers from a malady known to Ayurveda as Parigarbhika. The first step to be taken in such a condition is to switch over to other milk.

In diarrhoea of ordinary intensity, preparations made of the various parts of the Babul tree (gum acacia) are useful. A mixture of equal parts of the tender leaves of the tree with white Zeera (cummin seed) and black Zeera (caraway seeds) should be administered in doses of 180 grains each thrice daily. An infusion made of the bark of the tree (about a couple of ounces boiled in a pint of water) should be given thrice daily. Another useful remedy is to soak for two hours catechu (three drams) and cinnamon (one dram) in half a pint of boiling water and to give the decoction in 1½ to 2 oz. doses thrice. A powder of dried

fruits of Jambul (rose apple) and decorticated mango seeds can be given in doses of 10 to 30 grains thrice daily. Tender aerial roots of the banyan tree macerated in rice water should be given with butter milk. Alternatively, powder of shelled seed of mango should be given in doses of 20 to 30 grains.

Before we come to standard Ayurvedic preparations, let us mention other drugs which are of use in checking diarrhoea. Triphala powder (Harada, Behera and Aanwala)—he three myrobalans—is of use, decoction of the rind and the bark of the pomegranate tree, the paste of the roots of the tamarind tree, the powder of the flowers of the Dhataki tree (*woodfordia fruitcosa*), flea seeds or their husk, decoction of the roots of Kurchi (conessi) and the root bark of Tarwar (*tanner's cassia*) and powder of long pepper (Pipli) are of use.

Ayurvedic preparations administered in cases of diarrhoea are:

1.	Kutaja Churna	1 gm.	
	Gangadhara Churna	1 gm.	
	Hingavashtaka Churna—to be taken with lukewarm water or butter milk.	1 gm.	
2.	Raman Churna	240 mg.	Thrice daily with parched zira, saunf and honey
	Mahagandhaka Yoga	240 mg.	
	Sanjivani	120 mg.	
3.	Shankha Bhasma	120 mg.	Thrice daily with water, after meals
	Shunthyadi Churna	1 gm.	
	Bhaskara Lavana	1 gm.	
4.	Piyushvalli Rasa	240 mg.	Thrice daily with flea seed husk
	Kutaja Churna	500 mg.	

5. Rasanjanadi Churna	1 5 gm.	Twice	daily
Yamani Shadava	1.5 gm.	after meals	

DYSENTERY

Symptoms: Dysentery, or bloody flux, is a condition characterised by inflammation of the lower portion of the bowels, colicky pain in the abdomen and liquid or semi-formed stools mixed with mucus and blood. Modern medicine believes it to be the result of infection and characterises it as of two types: bacillary and amoebic. In the former, there is effusion of blood and in the latter, there is mucus present in the stools alongwith the bacteria which cause it.

In Ayurveda, amoebic dysentery is known as Pravahika and bacillary dysenty as Raktatisar. Many of the remedies prescribed for diarrhoea are useful in treating dysentery, particularly for the bloody flux or bacillary dysentery. We shall first deal with the substances and drugs useful in treating this condition before we come to standard Ayurvedic preparations.

Treatment: Lemon juice is very efficacious in dealing with ordinary cases of dysentery. A few lemons, peeled and sliced, are added to 12 ounces of water and boiled for a few minutes. The strained infusion is administered thrice daily. Small pieces of onions mixed with curd, given half a dozen times in the day is also helpful in dealing with dysentery. Equal parts of tender leaves of the peepul tree, coriander leaves and sugar should be slowly chewed to relieve the condition. Powdered seeds of Mehandi (henna) plant mixed with ghee should be made into small balls, of the size of a betel nut and taken twice with water. The tubercles of Nagarmotha (nut grass) should be powdered and mixed

with fresh ginger and honey. A 20-gramme dose of the preparation should be given thrice daily.

Bael fruit is, perhaps, the most efficacious in the treatment of dysentery of both the varieties. Pulp of the fruit mixed with gur should be given thrice daily. To deal with a chronic case of dysentery, unripe bael fruit is roasted over the fire and the pulp is mixed with water. Large quantities of the infusion so made should be administered with gur. The pulp of the unripe fruit mixed with an equal quantity of dried ginger should be given with buttermilk. The patient should subsist on butter milk during the course of the treatment. Chronic cases of dysentery can be cured by administering the following preparations:

1. Kutajaghana Vati	1 to 2 tablets two or three times a day before meals with water or buttermilk.
2. Piyushavalli Rasa	1 tablet twice daily with roasted bael fruit and gur.

Amoebic dysentery is a more serious condition. It is a disease endemic to tropical climates and once contracted, it does not leave the patient unless he is careful. It is characterised by discharge of mucus in the stools and griping pains in the abdomen. According to allopathy, the causative organism is *Entamoeba histolytica*. In its more virulent form, it may be similar to bacillary dysentery, with passage of blood with the stools, but in a sub-acute or chronic condition, discharge of mucus, dyspepsia, anaemia and general weakness is present. In more serious cases, the liver may be involved and a condition known as amoebiosis may be present. Loss of appetite and loss of weight are also present.

In Ayurveda, Kutaja (*holarrhena antidysenterica*) is the drug of choice for the treatment of amoebic dysentery. Powdered bark of the plant is administered thrice daily in a dose of one teaspoonful. A preparation known as extract Kruchi is also available on the market. The decoction is very bitter in taste and should be mixed with honey or sugar before it is given. Patients suffering from amoebic dysentery are also liable to fall a prey to chronic constipation and should take two tablespoonfuls of flea seed husk at bed time with milk or buttermilk. Ayurvedic preparation Rasa Parpati should be administered in a dose of two grains thrice daily in chronic cases of amoebic dysentery. A precaution to be taken is that the patient must live on milk, boiled rice and sugar. All salt should be prohibited, as also water.

As in the case of other diseases, the diet of the patient is of the utmost importance if he is suffering from dysentery. He must avoid fried things, ghee and other fats, chillies and other condiments and also heavy meals. Meat and its preparations should be avoided except in the case of soups. Fruits with a sour taste like pomegranate, citrus fruits and amla are useful in such cases. During a severe attack the patient should be advised complete bed rest. At this stage of the disease he should even avoid a cold bath.

SPRUE SYNDROME

Symptoms: Sprue or psilosis is a disease characterised by diarrhoea with passage of large, fatty stools, anaemia, sore tongue and loss of weight. It is considered by allopaths to be caused by an inborn error of metabolism, characterised mainly by the inability to absorb fats from the intestines. In later stages there is inability

to absorb carbohydrates, vitamins and minerals. That is why there is anaemia present which leads to extreme weakness and even death through wasting away of the body.

In Ayurveda this condition is called Grahani Roga, commonly known as Sangrahani. It tends to be chronic. The patient has diarrhoea, with frothy stools. A tendency is present to pass large quantities of stools in the morning when the patient gets up from bed. The disease, according to Ayurveda, does not owe its origin to any bacteria or germs, but is caused by the impairment of the functioning of the inner wall of the small intestine. Persons having a Pitta type of constitution are more prone to it than others. Emotional stresses and irregularity in meals is primarily responsible for the onset of the disease.

Treatment: In the earlier stage of the disease, the remedies used in curing diarrhoea can be of help in relieving the condition. But as the disease progresses it becomes more difficult to tackle it. The symptoms so resemble those of diarrhoea, that many physicians are misled into treating it as a common case of chronic diarrhoea. The leading symptoms which distinguish it from common diarrhoea are: gripping pain in the stomach before the passage of the stools, the massive quantity of stools passed early in the morning and presence of mucus in the faeces. There is also weakening of the body due to anaemia and loss of weight. The patient passes stools which are semi-digested or undigested. They may be formed or unformed, liquid or semi-solid. Malabsorption shows in the form of anaemia and weakness. There is constipation and diarrhoea present alternately.

The best Ayurvedic remedy for Sprue is Rasa Parpati, an amalgam of sulphur and mercury. The method of preparation of the drug is complex; it is aimed at removing the toxic effect of mercury and sulphur. A long process includes eight different steps before the medicine is ready. The medicine is administered in gradually increasing doses: it starts with two grains a day and is increased to ten grains. After ten days the dose is reduced till it reaches two grains again after which it is stopped. The course of treatment is called Parpati Kalpa.

The patient is advised a strict regimen during the period of treatment. Salt and water are both prohibited. He is not allowed to use water even for sanitary purposes. Milk and buttermilk are the mainstay of his nourishment with a litte sugar added to them. The treatment helps a patient to digest milk—sometimes ten to fifteen litres of it during the day—without any difficulty. In a way this resembles milk therapy, or Dugdha Kalpa, known for its rejuvenation properties.

Another important remedy used in the treatment of this condition is Jatiphaladi Churna, of which the main ingredient is the nutmeg or Jaiphala.

Ayurveda has distinguished between many types of Grahani, according to the Dosha which has caused it. Preparations like Agnikumara Rasa, Nripativallabha, Mustakadhyamodaka Vijayaparpati and Panchamrita Parpati are administered during the various stages of the disease.

Other remedies are:

1.	Kapardika Bhasma	2 gm.	To be taken twice daily
	Shanka Bhasma	2 gm.	
	Trikuta Churna	1 gm.	

2.	Kajjali	1 part	To be mixed with lemon juice and made into 2 grain tablets. One tablet taken twice daily with Maricha Churna and ghee is useful in chronic cases.
	Kapardika Bhasma	1 part	
	Shankha Bhasma	2 parts	
	Pippali Churna	4 parts	

Diet: As in most diseases, a dietary regimen during the disease is considered of vital importance in Ayurveda. A patient suffering from sprue is prohibited fried, fatty and spicy foods. Buttermilk and milk are the only foods which aid recovery and he is advised to take them in profuse quantities. Orange juice, ripe banana and dry grapes are also advised. But meat and fish are contraindicated. Vegetables like plantain, drum sticks, bitter gourd and white pumpkin are allowed. In case the patient gets constipation and diarrhoea alternately, as happens with some sufferers from sprue, he is advised to take flea seed husk at bed time with buttermilk. He is also recommended rest and asked to sleep for an hour or so during the day. Fasting for a prolonged period is contraindicated.

CHOLERA

Causes and Symptoms: Cholera, or Vishuchika as it is known in Ayurveda, is one of the most severe diseases of the intestines. It is also fatal if not treated in time. It is supposed to be caused by an organism called *vibrio cholerae* (*comma bacillus*) found in large numbers in the faeces of those suffering from the disease. It spreads through flies and water contaminated by the germs of the *cholerae* variety. Ninety persons out of a hundred suffering from this disease have an even

chance of succumbing to it. In the first stage which lasts from three to twelve hours, there is painless diarrhoea and vomiting. This is followed by cramps in the stomach, intense thirst and restlessness. There is fever also in the latter stages but signs of collapse appear rapidly. Death occurs in less than 24 hours, but in an epidemic form people are known to have succumbed to the infection within a matter of hours.

A curious fact which should be mentioned here is that the bodies of cholera victims remain warm even after death. In some cases the temperatures are known to have risen after death leading to muscular contractions as a result of which the limbs are distorted to unnatural positions.

In the case of a fast spreading disease like cholera, prevention is as important as cure. The patient suffering from the disease should be segregated and the place where he vomits or passes his stools should be liberally sprinkled with slaked lime or other disinfectant materials. Allopathy has devised an inoculation which grants immunity from the disease but here we are concerned with its treatment after it has struck.

Treatment: Ayurveda recommends that the physician should not hasten to stop the diarrohea and the vomiting present in a case of cholera. The disease should be allowed to run its course for an hour or so, so that the toxins are ejected from the body. But a serious complication—a direct result of the disease—is the loss of body fluids, or dehydration which must be dealt with. It should be prevented by administration of liquid preparations in small doses. Airak of Ajwain, water mixed with juice of lime or tamarind water (old tamarind mixed with water) should be administered in small doses. Large quantities of liquids would only

help vomiting and should be avoided.

The initial remedy is Amritdhara or Karpurdhara in small doses of two to three drops every fifteen minutes. Care should be taken to restrict the dosage because larger quantities of these preparations might lead to stoppage of urine which would create needless complications. If these remedies fail to help, Lasunadi Vati (a preparation of garlic, cummin seed, caraway seeds black salt, dry ginger, long pepper, pepper and juice of lime, etc.) should be administered in doses of one pill with water mixed with juice of fresh lime every half an hour to an hour till the virulence of the disease subsides.

The other Ayurvedic remedies for cholera include Ajirnakantaka Rasa, Sanjivani Vati, Amrasthikwatha, Arka Vati, Visuchika Vati, and Visuchividhvansan Rasa. If there has been dehydration, the only remedy left to the physician is to infuse a saline liquid through the vein. If there is suppression of urine, steps should be taken to administer a diuratic. A hot water bag applied to the region of the bladder can help as a local application. If after the diarrhoea and the vomiting of the cholera patient have been controlled, but he is unable to pass urine, it is an unhealthy sign and must be dealt with expeditiously. Mritsanjivani Sura is the drug of choice to induce urination.

Diet: A patient suffering from cholera should not be given any solid food. Liquid foods, bland substances and gruel are the only substances he can ingest without endangering a recurrence of the disease. He should drink water which has been boiled and then cooled.

FLATULENCE

Symptoms: An irritating, though not fatal, disorder of the digestive system is the presence of the wind in the stomach or the intenstines which gives rise to discomfort due to distension of the stomach or the intestines. It is called Adhmana in Ayurveda. If the wind is not expelled through belching or through the anus as a fart, and depresses the diaphragm, it may lead to what is known as techycardia (rapid beating of the pulse). In some cases it leads to pain in the region of the heart leading the victim to suspect that he is suffering from a heart attack.

Formation of gas in the stomach or the intestines is primarily due to defective digestion because the foods ingested are not properly assimilated into the system and the presence of the waste matter in the intestines goes on putrefying. This putrefaction leads to flatulence and the discomforts associated with it.

Treatment: Flatulence is one of the symptoms of dyspepsia and the wise physician should first try to cure the condition which has caused it. If it is because of constipation—as it usually is—that condition should be dealt with. The best remedy in such a condition is Hingu Triguna Taila which should be given in doses of two spoonfuls once a day on an empty stomach with hot water. Kumari Asava administered in doses of one ounce twice a day after meals can work wonders in dealing with flatulence.

Hingvashtaka Churna is another remedy which is a specific for flatulence. As to regimen of diet, the patient should be advised to avoid heavy, spicy and greasy or fatty foods. Pulses and beans of all types as also foods with a high carbohydrate content like

potatoes should be avoided. Buttermilk and curds are advised because milk does not suit the condition. Long walks before meals and a little rest afterwards is advised. The patient should avoid worry and mental stress of any kind and should take his food in pleasant surroundings.

ULCERS OF THE STOMACH

Causes and Symptoms: An ulcer is a breach on the surface of the skin or on the membrane lining any cavity, such as the stomach, which does not tend to heal quickly. The destruction of the tissue and the cavity so formed is the term applied to ulcers. The process of formation of an ulcer in the stomach—generally known as a peptic ulcer—is supposed by the allopaths to be the result of hyperacidity—the presence of too much acid in the stomach. Why the amount of the acid increases beyond its normal quantity is a question answered differently by the allopaths and the practitioners of Ayurveda. Stress and worry are supposed to be the causes, but modern medicine fails to explain why two persons under similar conditions of stress are different in so far as proclivity towards ulceration is concerned. One person gets the ulcer, whereas the other does not. Ayurveda answers the question logically and scientifically. Only those persons who are afflicted with a Vatiya type of constitution or in whom Vata is the predominant dosha are prone to ulcers of the stomach.

Aggravation of the Vata dosha in the body gives rise to ulcers either in the stomach or the duodenum, the proximal portion of the intestine. The term peptic ulcer is a general term applied to all ulcers in the stomach, whereas duodenal ulcer is the term applied

to an ulcer in the duodenum, called Grahani in Ayurveda. Grahani is the link with the stomach, its upper end connecting with the stomach. Pancreatic juice and bile are excreted into the duodenum to mix with the permeated food in the stomach. Grahani, therefore, plays a major role in the process of digestion.

Duodenal ulcer is a painful condition, the pain being similar to that of colic. It is known as Parinama Shula in Ayurveda. The pain comes when the food has been digested, due probably to the churning motion of the membrane of the stomach, and ceases when fresh food is ingested. In severe cases of ulcer or when it is too deep, the pain may continue even when there is food in the stomach.

The ulcer results in gradual loss of weight because of impairment of digestion and defective or incomplete absorption of food. Pain makes the patient irritable and hyper-sensitive. The ulcer may bleed, the blood mixing with the stools or, in very severe cases, coming through the month. Excessive loss of blood through the mouth is a serious condition and the patient may have to be hospitalised and given an immediate blood transfusion. Sometimes, there may be only vomit preceded by eructation, the patient throwing up the food. But if such an act of vomiting is followed by a rapid and thready pulse—indications of falling blood pressure—immediate action should be taken.

Treatment: Since hyperacidity, or Amlapitta, to give the condition its Ayurvedic name, is the villain of the piece which ultimately leads to stomach ulcers, the first step is to ban all foods which aggravate the condition. Fried foods and spices, specially chillies, should be totally prohibited. Bland, easily digestible foods should be the mainstay of the patient's diet. Milk should

be freely taken, preferably at intervals of three to four hours in the day, particularly when the pain of the ulcer occurs at times when the stomach is empty. Milk, wheat and ghee should be taken in adequate quantities

Ayurvedic medicine of choice in gastric ulcers is the Sukumara Ghrita. It should be administered in doses of two teaspoonfuls on an empty stomach with warm milk. If the patient is unable to digest ghee or if ghee does not agree with him, the medicine should be given with warm water. The dose must be adjusted according to the digestive powers of the patient. Some patients are unable to tolerate standard doses of the medicine and they must be alterted according to the circumstances of the case. The dose should be gradually increased to six teaspoonfuls over a period.

The pain of the ulcer is best dealt with by another Ayurvedic preparation—Shankha Bhasma. In the case of excruciating pain, Maha Shankha Vati should be given.

Ulcers in the stomach or the duodenum are sometimes prone to automatic healing. A disturbance in the routine of the patient may again aggravate them. The remedy mentioned above should, therefore, be taken for a long time. The subsidence of the colic should not be taken as the end of the malady. Medication should continue for some weeks after the pain has totally vanished.

In addition to the diet prescribed above, the patient must be advised to keep himself free from worry and the stresses of life which are likely to exacerbate the ulcer. He must take sufficient rest and sleep for an hour or so during the day also. His bowel movement must be ensured because constipation can only contribute to worsening of the condition. The best way to deal with

constipation of patients suffering from gastric ulcers is either husk of fleaseed taken at bed time or castor oil. No strong purgatives should be administered to such patients.

COLIC PAIN

Causes and Symptoms: The term colic, or Parinami Shula, is generally applied to pain in the abdomen, usually in the neighbourhood of the navel. It comes in spasms and is generally attended by constipation. Simple colic commonly arises from the presence of some indigestible matter in the alimentary canal. Colic pain is relieved by some pressure on the abdomen and is not attended by fever, which distinguishes it from colitis—the inflammation of the intestine.

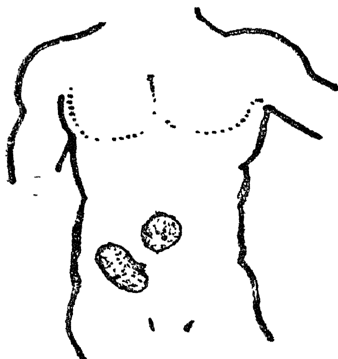
Colic in adults is either due to presence of wind in the stomach, the result of chronic constipation or a result of exposure to damp and cold. Infants being artificially fed are also prone to the malady. The attack of coilc is generally—and mercifully—of short duration but it should not be ignored because the spasms are likely to lead to a twisting of the intestines which may necessitate surgical interference.

An attack of colic pain may also be due to appendicitis (inflammation of the appendix), gallstones or stones in the kidney, or inflammation of the liver or the ovaries. In Ayurveda it is known as Shula and is caused by the aggravation of Vayu, one of the three dominant Doshas.

The pain may also travel to other parts of the body like the scapular region (the shoulder blades) or the genital organs. It may also be attended with nausea and vomiting.

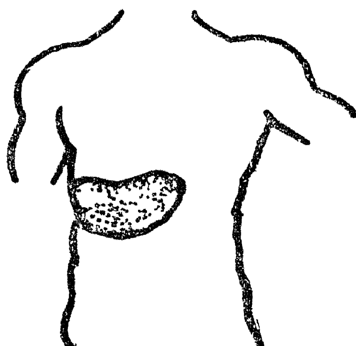
PAIN IN THE ABDOMEN

Appendicitis



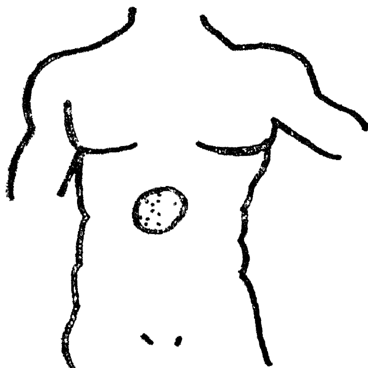
first it hurts here
later it hurts here

Liver



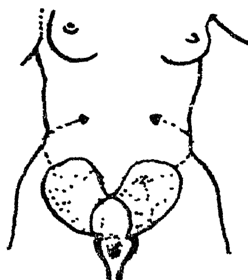
pain here. at times it spreads to the chest

Ulcer



Pain in the 'pit of the stomach'

Inflammation or tumor of the ovaries



pain on one side or both, sometimes spreading to the back

Treatment: Immediate relief to the victim of colic can be provided by administration of two remedies: Shankha Bhasma or Hingvashtaka Churna, both drugs of choice in Ayurveda for colic pains. In severe cases Maha Shankha Vati should be administered in doses of two tablets four times a day. Another drug is Lahsuna-adi Vati which should be given in a dose of two tablets, four times a day. Abhraka Bhasma can also be given in doses of two grains four times a day mixed with honey.

The wise physician, after relieving the colic, must go into the malady which has caused it, because pain is usually an indication of a disease rather than a disease in itself. If the colic is due to appendicitis or presence of stones in the kidney or the bladder, steps should be taken to relieve those conditions. But if the pain is caused by presence of Vata it should be taken to mean that chronic constipation or dyspepsia has caused it. In that case steps should be taken to relieve constipation after the attack of colic has passed. A mild purgative should be given after which the patient should be advised to improve his diet. In other words, he should take foods which do not aggravate the constipation. Fried foods and carbohydrates and starches should be restricted to the minimum. Boiled vegetables and fruits should be taken in larger quantities and fats should be avoided.

INTESTINAL WORMS

The Various Kinds: Intestinal worms are parasites (organisms who live upon others, called hosts) which are harmful, as opposed to the bacteria which help synthesize Vitamin B, an essential element for the nourishment of the body. The harmful parasites give rise to many symptoms which are troublesome and which may

lead to severe complications. The most common parasites found in human intestines are: round worms, tape worms, hook worms, thread worms and giardia.

The presence of such parasites in the intestines give rise to symptoms such as a voracious appetite, diarrhoea, anaemia and headaches. Thread worms give rise to acute irritation round the anus forcing the sufferer to scratch it. It is not only insanitary, but also a social disability. Round worms may cause cough, vomiting, nausea and loss of appetite Hook worms may lead to anaemia, since these parasites tend to suck the blood of the sufferer.

The worms are secreted through the stools, sometimes in parts. In insanitary conditions, the worms are likely to spread and cause further infection to others. That is why the lavatories must be kept clean and away from kitchens and dining rooms.

The presence of the worms in the stools should never be neglected; their continued presence may even lead to obstruction of the intestine or the bile ducts giving rise to further complications.

Treatment: The treatment for worms must start with diet. The patient should be kept on light diet: all heavy, not-readily-digested foods should be banned. Sweet things are also best avoided, because they help the stomach to turn into a breeding ground for germs. Thread worms, it may be stated, trouble the infants more than the adults, because their mainstay is milk or sweets and there are no bitter or pungent substances in their food. The patient must, therefore, be encouraged to include bitter things in his food, e.g., bitter gourd (Karela), Neem flower and bitter variety of drumstick. Garlic should be added in substantial quantities to the vegetables or meats eaten by the patients suffering from

intestinal worms.

If there is constipation present in addition to intestinal worms, purgatives should be used. The patient should never suppress the urge to void his bowels. Fasting for at least one day in the week is also helpful in controlling the intestinal worms.

Anthelmintics (drugs which destroy intestinal worms) like fresh seeds of Palash (flame of the forest), Vidanga (*embelia ribes*) or Baheda, one of the Triphalas, are the specifics in the case of intestinal worms. Tender leaves of the Indian coral (Mandar) given with honey are also helpful. Vidanga and Palash seeds ground together should be administered in one teaspoonful doses thrice daily. Haridra (*curcuma longa*) is also helpful if the powder of the rhizome of this plant is given in a dose of one teaspoonful three times a day with a cup of milk. This drug is also useful in healing urticaria and fevers of certain types.

Parseekaymani (Khurasani Ajwain)—in powdered form—about three grains should be administered after the patient has eaten about 10 grammes of gur. The drug is available in the form of Thymol and is a specific for round worms. Raw areca nut should be ground on a piece of stone and mixed with the juice of a lime. It deals with thread worms more effectively than many other remedies. Three grains of seeds of round bitter gourd (Tumbi) taken with buttermilk would deal with the most intractable case of intestinal worms.

Other specifics are Kamipallak Churna in doses of one to two grammes and Kirmani Ajwain Churna in doses of one to three grammes taken thrice daily.

GASTRITIS

Causes and Symptoms: Gastritis (inflammation of the stomach) or, to give it its Ayurvedic name, Urdhavaga Amlapitta, is a troublesome condition which gives rise to many complications if not treated in time.

The most frequent cause of an attack of gastritis is a dietary indiscretion, e.g., over-eating, excessive intake of alcohol. Infections like influenza, food poisoning, toxins of uraemia and gout and swallowing of acids and alkalis also give rise to gastritis. Persons having a Pittıka constitution are more prone to an attack of the disease than others. Constipation tends to aggravate the condition more than any other disorder.

Chief symptoms are: loss of appetite, sıckness or nausea, headache and giddiness. There is also paın and a general feeling of discomfort in the region of the stomach, sour eructations and frequent vomiting, first of food and then of bilious matter. There is also tenderness in the upper abdomen which is aggravated after the ingestion of food. If the disease becomes chronic it may lead to anaemia and consequently emaciation.

Treatment: Since the disease is caused by vitıation of Pitta, the best therapy is purgation in the first instance. Ghee being a substance which counteracts Pitta, its preparations are recommended for treatment of gastritis. Sukumara Ghrita is a specific which is administered in doses of one to two spoonfuls mixed with a cup of milk given first thing in the morning. It may lead to some impairment of the digestive powers of the patient in the beginning, but he recovers the power of digestion after some days. Amalaki (*emblica officinalis*) in a powdered form is also helpful; the

standard dose is two teaspoonfuls administered four times a day. Alternatively Dhatri Lauha (calx of iron mixed with juice of Amalaki) should be given in one teaspoonful doses twice daily. In case of constipation persisting in a case of gastritis, Avipattikara Churna should be given in a dose of two teaspoonfuls at bed time.

The diet advised in a case of gastritis is milk with sugar and a little of old rice. Spices and condiments, alcoholic drinks, sour things, chillies and pungent substances which are likely to aggravate acidity or Pitta must be avoided. Other substances permitted to a patient suffering from gastritis are: barley, wheat, rice (at least one year old), cucumber, bitter gourd, green banana, pumpkin, pomegranates and cow's milk.

The patient should not undertake any hard mental or physical work. Anxiety and anger should be avoided. Bed rest is also advised, but the patient must be encouraged to take a walk in the early morning for about two kilometres.

PILES

Symptoms and Causes: Piles or haemorrhoids, consist of a varicose and often inflamed condition of the veins about the lower end of the bowel. The condition arises when the veins in the anal region become varicose. In Ayurveda, the condition is called Arsha. The prime cause of piles is constipation, the others being, a sedantry way of life, lack of exercise and some morbid conditions of the liver.

Piles is of two types: (1) dry, in which there is inflammation of the external piles and pain, which may continue all the time becoming unbearable at the time of voiding the bowels; and (2) bleeding piles, in which

the internal piles start bleeding. In the latter type of piles there may be excessive bleeding, leading to anaemia and consequent emaciation.

Sushruta has advocated surgery for curing the piles, but Charaka, the physician, has advised drug therapy for the malady. If piles is neglected for a long time, it may lead to prolapse of the rectum (when the rectum protrudes out of its casing), impotence, proctitis and haemorrhgea. Excessive bleeding from the piles has, in some cases led to death due to loss of the vital fluid.

Ayurveda has recommended the use of drugs to increase the digestive powers, to relieve constipation and to relieve flatulence which exacerbates the pain of piles. In the case of bleeding piles, the drug of choice is Nagakesara (*mesua ferrea*). The powder of the flower of this plant should be administered to the patient in one teaspoonful doses thrice daily. Haritaki (*terminalia chebula*) is recommended for the malady in which there is bleeding, as well as inflammation and pain. One teaspoonful given two to three times a day with milk is sure to relieve the condition. Chirabilvadikashay, Lavanottamadi Churna, Samashara Churna, Nagkesharayoga and Samangadi Churna are some of the other standard Ayurvedic remedies.

Regimen: The patient should be advised not to use a hard seat or ride horses during the course of the treatment. He should not indulge in too much sex, nor suppress the urge to void the stools for fear of pain which is attendant in case of dry piles. His food should consist of bland diets and foods which are easily digestible. Goat's milk is also helpful in this condition.

3

DISORDERS OF THE RESPIRATORY ORGANS

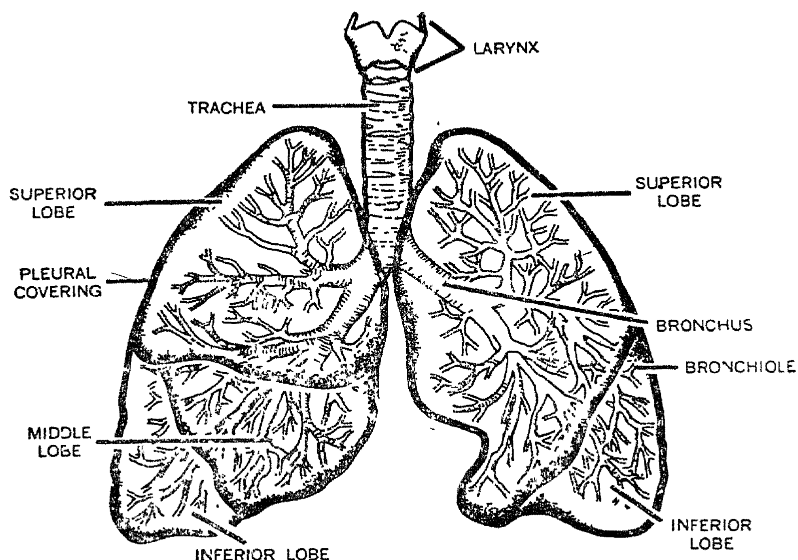
प्राणं प्राणहरा रोगा बहवो न तु ते तथा
यथा श्वासश्च हिक्का च प्राणानाशु निकृन्ततः ।।
च० स० 17: 6

Although there are many diseases which destroy human life, there are none that terminate it faster than hiccup and dysponea.

Respiration is the process in which air passes into and out of the lungs with the object of allowing the blood to absorb oxygen and to give off carbon dioxide and water. The main respiratory organs are: the nose, the pharynx or the throat, the larynx, the trachea or the windpipe, the bronchi or bronchial tubes and the lungs.

DISEASES OF THE NOSE

The nose is not only the upper end of the passage through which air enters the lungs, it also lodges the organ which furnishes the sense of smell. The outer part of the nose is not of much importance, except aesthetically; it is the inner organ—the main part of the cavity—which is placed above the roof of the mouth which is the real nose. The diseases to which the nose is susceptible are many, the chief among them being rhinitis (inflammation of the nose) which may become chronic if not treated in time. According to Ayurveda, the number of diseases of the nose is 34. About a dozen of them are



LUNGS

the various forms of inflammation and the rest pertain to tumors or boils which give off pus or produce foul smelling phlegm. The main villian of the piece behind these diseases is the lowly common cold, or Pratishyaya, to give it its Ayurvedic name. Coryza or catarrh of the nose is a common condition found in cold climates and at the junction of the seasons in countries like India. Modern medicine has failed to come up with a sure shot remedy for this disease in spite of research extending over three decades. The antibiotics so popular among the allopaths may suppress the symptoms for some time, but in most cases they merely turn the phlegm into a thick viscid substance not easily ejected from the system.

This is an irritating condition which is not fatal, but if neglected for a long time, it can create complications best avoided by timely attention. Common cold is generally treated lightly both by patients and physicians as is clear from the old adage that if you take medicine for a cold, it cures in a week, otherwise it takes seven days.

COMMON COLD

The Five Types: Ayurveda has recognised five types of cold or Pratishyaya· (1) born out of Vata; (2) born out of the vitiation of Pitta; (3) born out of Kapha; (4) born out of disorders of the blood; and (5) chronic cold, born out of the three Doshas.

Treatment· In the case of a running nose, smoke from burning turmeric should be inhaled; it will encourage a copious discharge and would shortly provide relief. Smoke from the root of Amaltas also provides quick relief. Paste made of nutmeg (Jaipahla) and cow's milk together with a grain of opium should be applied to the forehead and the nose. In case the nose is blocked and the patient is unable to eject the phlegm, a powder of equal parts of cinnamon, black pepper, cardamom and seeds of Krishnajiraka (*nigella sativa*) should be sniffed to induce sneezing.

In a coryza of recent origin, the standard preparation in Ayurveda is the Laxmivilas Churna 120 mg., Shring Bhasma (calx of the horn) 120 mg. and Narsar 240 mg. administered thrice in the day with warm water. Vyoshadi Vati should be sucked as a lozenge thrice to four times in the day. Decoction of bran should be taken at bed time in a dose of 58 ml.

Six gm. of garlic and an equal quantity of gur

pounded together may be given at bed time.

In chronic coryza, the Ayurvedic remedies to be used are:

1.	Mahalaxmi Vilas	120 mg. to be taken with powder of Mulethi, honey and ghee.
2.	Chitrak Hiratiki	10 gm. to be taken in the morning and last thing at night with warm cow's milk.
3.	Vyoshadya Churna	3 gm. to be taken twice with warm water after meals.
4.	Madhuyasthyadi Quath	50 ml. thrice daily.

A person suffering from cold should be encouraged to take meat soups, vegetables with a bitter or sour taste, garlic, alcoholic liquor in moderate quantities and warm water. He should avoid a cold bath, particularly of the head, heavily spiced or fried foods and if the nostrils are dry and caked, he should take more and more of curds.

NOSE BLEED

Symptoms: It is not uncommon for children, or even adults, to have an occasional nose bleed. According to Ayurveda, bleeding from the nose is due to vitiation of Pitta. If Pitta has a tendency to go up, it may cause bleeding from the nose.

Treatment: Bleeding from the nose is not a very serious condition, unless it continues for too long and loss of blood causes a danger to the life of the patient.

If that is so, only surgical interference may help, because in that case, the blood vessel in the organ may have burst. But in an ordinary nosebleed, the patient should be asked to lie still and cold compress should be applied to his head· In the lying position his head should be lower than his feet. He should be asked to inhale iced water and should refrain from blowing his nose. If this does not help, the *swaras* (juice) of any of the following drugs (a few drops) should be dropped in the nasal passage: (1) onions; (2) Dub grass; (3) tender flowers of the pomegranate tree; (4) shelled mango seeds and (5) Jwasa (*alhagi pseudalbagi*).

In case bleeding is very severe and the patient appears to be losing too much of blood, gauze soaked with Panchkshiri Kashaya, alternatively, alum (Phitkiri), camphor and Majuphala in equal quantities in powder form should be dropped into the nose. Amla (myrobalan) should be ground in buttermilk and the paste should be put in a little boiling ghee. When it is cold it should be applied to the forehead and the outside of the nose.

Sushruta has advised that in case of continued bleeding after all the medicines described above have failed to ameliorate the condition, recourse should be taken to surgery. Electric cauterization is the final remedy.

In case the nosebleed is due to high blood pressure, drugs to reduce it should be administered along with electric cauterization so that it does not recur.

INFLUENZA

Symptoms and Causes: Influenza, also known as La Grippe, is an acute infectious disease, characterised by a sudden onset, inflammation of the upper respiratory

tract, fever which ranges between 101° to 103° (F) and generalised pains and aches. Allopathy believes it to be the result of a virus and that is why the practitioners of so-called modern medicine talk of an incubation period which ranges from one to ten days. There have been many epidemics of the disease in history which have taken a heavy toll. In the nineteenth century alone, five such massive epidemics have been recorded resulting in millions of casualties. The severest epidemic was during 1918-19 which killed 15 to 20 million people throughout the world.

The onset of the disease is marked by fever, headache, sore throat, coryza with sneezing, pains all over the body and restlessness.

Cardinal symptoms of influenza are: irritation and (later) inflammation of the nose, pharynx and larynx, nose bleed and a dry hacking cough. In the latter stages of the disease, there may be involvement of the lungs, particularly among the elderly patients. The disease is marked by extreme prostration and even after recovery, the sufferer has to undergo a long period of convalescence.

Influenza generally strikes at the junction of the seasons. Ayurveda calls it Vata Sleshmika Jwara. The balance of the three Doshas, Vata, Pitta and Kapha, is disturbed when the seasons are changing. Persons who are prone to suffer from constipation or from diseases of the mucus membrane of the nasal passage or the throat are more susceptible to influenza.

Treatment: Long pepper (Pippali) is one of the best remedies for influenza and troubles associated with it. Powder of long pepper (half a teaspoonful) mixed with two teaspoonfuls of honey and half a teaspoonful of ginger juice administered thrice in the day would effectively counteract the onset of influenza. The pre-

paration is particularly useful in avoiding complications which follow the onset of the disease, namely, the involvement of the larynx and the bronchial tubes. The other drug of choice is the green leaves of the Tulsi plant (*ocimum sanctum*). About one gramme of these leaves and dry ginger should be boiled and the decoction taken as tea (sugar may be added to according taste) Incidentally, the leaves of the plant are also helpful in preventing malaria and other seasonal fevers. A few leaves may be boiled with tea and the decoction taken twice at tea time.

Another effective remedy for influenza is Haridra (turmeric). A teaspoonful of the powder or paste of turmeric should be added to a cup of warm milk and taken with sugar thrice in the day. It prevents lung complications and also activates the liver, which has a tendency to become sluggish during an attack of influenza.

A standard ayurvedic preparation is Tribhuvana Kirti Rasa. Two tablets (one grain each) should be given to the patient with a teaspoonful of honey three to four times a day. If the fever is accompanied by cough, a teaspoonful of ginger juice should be added.

The regimen to be followed is that the patient should not be given any solids for the first 24 hours of the onset of the disease. Sago boiled in water or milk may be given to sustain his strength. Soups of vegetables and meat can supplement his diet. Garlic fried in ghee or butter or in a raw form is also helpful. Heavy foods should be avoided. Fruits like banana, gauva and those with a sour taste should be prohibited. If the patient is addicted to tea, he should be advised to replace it with coffee or asked to add Tulsi leaves or Banafsha flowers to the infusion of tea. Exposure to cold, bathing, physical labour and sleeplessness should be avoided as they tend

to aggravate the condition. A mild laxative is also indicated in most cases.

COUGH AND DISORDERS OF THE THROAT

Various Kinds: Throat, in popular language, is the term applied to the region in front of the neck. The correct use is the pharynx and the cavity at the back of the mouth, into which the nose, the mouth, larynx, gullet and the Eustachian tubes open.

In Ayurveda, however, the diseases of this region of the body are treated under the general head Kasa Roga. Kasa Roga is sub-divided into five heads: (1) born out of Vata; (2) caused by Pitta; (3) caused by Kapha or phlegm; (4) caused by injuries of infections; and (5) caused by tuberculosis. The first three types are easily handled, but the latter two categories are a horse of a different colour. But whatever the type of Kasa, if it is allowed to persist, it becomes chronic and might even result in consumption or TB. Clinically, the diseases may be distinguishable from each other, but practically Kasa Roga is broadly of three types: (1) cough without expectoration; (2) cough with expectoration; and (3) cough mixed with blood, which one finds in typical cases of pulmonary tuberculosis. Injuries or infections in the region of the throat might also produce blood mixed phlegm which is a serious condition.

Ayurveda has categorized what the modern medicine calls bronchiti, also as a type of Kasa Roga: it may be acute or it may turn chronic and deteriorate into tubercular bronchitis. In some cases, particularly among the aged, the lack of elasticity in the lung tissues, or lung fibrosis to give it its technical name, the disease

may turn into bronchitectasis.

Diseases of the throat may be of respiratory origin or of an extra-respiratory character. Pharyngitis, tonsillitis and adenoids are disorders not directly connected with the process of respiration, even though we propose to treat them under this head.

Treatment: In coughs where there is no expectoation, i.e., no phlegm is produced, the treatment should start with the lubrication of the throat. Ayurvedic practitioners advise such patients to consume milk and ghee: if there is constipation present, laxatives like castor oil should be administered. Decoction of liquorice root (Mulethi or Madhuka) should be given with sugar or honey to clear the phlegm. Another common remedy is black pepper in doses of 5 to 13 grains given with ghee, sugar and honey. A paste made of equal parts of black raisins, dates, black pepper, Vidanga (Bahera), long pepper (Pipli) and honey should be used to get quick relief. Alternatively, a linctus made of the powder of long pepper, ginger, nut grass (Nagarmusta), Harada and sugar or honey can be taken with advantage.

Standard Ayurvedic preparations used in cough are: (i) Chaturashana Churna; (ii) Eladi Churna; (iii) Yavani Shadava; and (iv) Aparajita Leha. The latter remedy is a specific for whooping cough.

Diet: The dietary regimen to be followed in cases of cough and allied disorders is to encourage the use of wheat, moong (green gram), old rice, barley, goat's milk, cow's milk and ghee, soup of mutton or venison, raisins and amalaki. The stuffs which one should avoid are: bael fruit, brinjal, bitter gourd, mustard, fried artichoke. The patient should desist from sexual

intercourse and sleep during the day.

WHOOPING COUGH

Causes and Symptoms: Like most diseases allopaths believe whooping cough to be a result of infection caused by the organism known as *Bordetella pertussis.* In the beginning, it is marked by catarrh of the nose, sneezing, watering of the eyes, irritation of the throat, feverishness and cough. Later, the symptoms of catarrh disappear but the cough becomes more persistent. The cough is marked by paroxysms of coughing consisting of a series of violent and rapid expiratory coughs succeeded by a loud sonorous or crowing inspiration—the whoop; hence the name whooping cough. The patient sometimes turns blue in the face because the paroxysm deprives his lungs of air. Children are usually more susceptible to the malady than the adults.

Treatment: According to Ayurveda, the whooping cough (Dushta Kasa) is the result of disturbance of the Vata Dosha in the body and the remedies alleviating the condition of Vata or restoring its balance in the body are to be administered. The best remedy, mentioned above, Aparajita Leha, should be the medicine of choice in whooping cough. Other remedies are: Dashamuli Ghrita; Kantakaryavaleh and Panchmuli Kashaya. Juice of ginger (14 ml.) with an equal quantity of honey taken twice a day is also helpful.

Diet: The dietary regimen for whooping cough is the same as prescribed for dry, hacking coughs mentioned above. Castor oil should be occasionally administered to the patient to relieve his constipation and also to relieve the pain he is liable to feel because the paroxysms make his abdominal muscles tender. The

patient must be protected against exposure and sudden colds as they are liable to aggravate the condition and hamper a quick recovery.

BRONCHITIS

Symptoms: A serious variety of Kasa Roga, bronchitis (Shwasa Pranati Shoth) is characterised by inflammation of the bronchial tubes which carry air to the lungs. It is a disease endemic to cold, damp climates but may strike anywhere. Even though it is caused by certain germs, the susceptibility of certain constitutions cannot be denied. Ayurveda ascribes it to impairment of the digestive processes and the remedies selected for its cure are those which help restore the digestive balance too.

The inflammation of bronchitis attacks the mucous membrane of the bronchi to which phlegm adheres and there is difficulty in expelling it. The phlegm, when expelled, is found to be viscid and purulent. Because of the tendency of the viscid phlegm to stick to the bronchi, there is difficulty in breathing and the lungs are starved of air. A fit of coughing may turn the face of the patient blue and that is why you will find bronchitis patients thin and emaciated. In its acute form it may give rise to temperatures, breathlessness and loss of appetite. In its chronic form it is, sometimes, a manifestation of tuberculosis. If proper care is not taken and the disease becomes chronic it may deteriorate into bronchial asthma.

Treatment: The simplest treatment for bronchitis is the administration of one teaspoonful of turmeric powder (Haridra) with a glass of milk twice or thrice daily. It acts best when taken on an empty stomach.

A powder of equal quantities of dried ginger, black pepper and long pepper (Pipli) can be given thrice daily. It may be mixed with honey or infused with your daily tea. Because of their anti-pyretic qualities a powder of these three deals with the fever attendant upon bronchitis and also tones up the metabolism of the patient.

Standard Ayurvedic preparations for bronchitis, both acute and chronic, are given below:

1.	Rasa Sindur	120 mg.	To be taken thrice
	Pravala Pisthi	240 mg.	daily with ghee
	Sitopaladi Churna	3 gm.	
2.	Kaphachintamani	120 mg.	To be taken
	Kaphaketu	120 mg.	thrice daily
	Shringyadi Churna	2 gm.	
3.	Juice of Vasa (*adhatoda vasica*)	2 teaspoonfuls	
	Honey	2 teaspoonfuls	
	This is to be taken thrice daily.		

In case of a congested throat which accompanies bronchitis in many cases, Khadiradi Vati should be sucked as a lozenge five times a day. The main ingredient of the drug, catechu, helps relieve the congestion.

Regimen: Curds and sour substances should be avoided. Banana and gauva are also fruits which are contraindicated in this malady.

BRONCHIAL ASTHMA

Symptoms: Asthma is characterised by difficulty in breathing, a sense of tightness, constriction around the chest, and a wheezing noise as the breath is expel-

led. The small bronchial tubes which connect with the lungs are constricted due to swelling or accumulation of viscid phlegm in the main bronchi, hence the difficulty in inspiration and expiration. The attack of asthma may come without warning, because of the hypersensitivity of the patient to certain substances like pollen, dust, emanations from certain animals like dogs and cats, certain foods to which the person is allergic and, of course, certain bacteria.

The attack of asthma comes on in the early morning when the patient suddenly wakes up with a feeling of apprehension and alarm. He sits up as the breathing suddenly becomes impossible in a recumbent position. He may rush to open the window as it becomes impossible to breathe in a closed room. The attack may last for a few hours or a few days before it subsides and, in the early stages of the disease, it leaves the patient normal. It is only when it becomes chronic that he acquires a typical asthmatic look—a pale, van face and an emaciated body.

Asthma and bronchial asthma ar similar diseases and the remedies are, therefore, common. Drugs administered in chronic cough and whooping cough may also provide some relief in cases of asthma. Bronchial asthma is known as Tomaka Shvasa in Ayurveda and is supposed to originate from afflictions of the stomach and the gastro-intestinal tract. That is why in the preliminary stage of the disease or just before its onset, the patient complains of indigestion, constipation or diarrhoea.

Remedies: Standard preparations for the complaint in Ayurveda are: Chyavanaprasha and Agastya Rasayana. The main ingredient of the former medicine is the lowly Amala, the richest source of Vitamin C in nature. A peculiarity of this fruit is that its Vitamin

content is not lost by exposure to heat as is the case with other drugs and fruits. The latter preparation is indicated in cases of asthma where the patient is constipated; in the particularly emaciated sufferers, Chyavanaprasha is the better remedy. Both the drugs can be taken in teaspoonful doses thrice a day, preferably before food is ingested. They are slow acting remedies but are surer in their efficacy. In chronic cases, their effect is evident from the increasing gap between successive attacks.

Alongwith the remedies mentioned above, Sitopaladi Churna should be taken thrice or four times a day in one teaspoonful doses with honey. Since the drug is likely to cause irritation of the throat, it is better mixed with honey and taken as a linctus. Medicines containing minerals which are recommended in cases of asthma and bronchial asthma are: Swasha-Kasa-Chintamani Rasa, Suvarna-Pushpasuga Rasa, and Kanakasava.

The following prescriptions are of particular value:

1.	Vasa Churna Shukti Bhasma Trikuti Churna	2 gm. 125 mg. 1 gm.	To be taken thrice daily with honey
2.	Old Gur Mustard Oil	10 gm. 10 gm.	Acharya Chakrapani has recommended this for poor patients. It should not be taken in hot weather.
3.	Bhurangi Nagara	2 gm. 2 gm.	Should be ground into paste with water and taken twice daily with warm water

The patient should be advised to avoid curd, butter

milk, banana, guava and fried foods. Light food should be taken at night and all sour substances should be banned. Smoking is contraindicated and the consumption of liquor, if the patient is addicted to it, should be reduced to the minimum. Hard exercise and exposure to cold and damp should be avoided.

TONSILLITIS

Causes and Symptoms: Tonsillitis is the inflammation of the tonsils—the small rounded masses of mainly lymphoid tissues behind the tongue on either side of the pharynx. Modern medicine believes the disease to be caused by an organism, *haemolytic streptococcus*, and latest research has reached the conclusion that the tonsils act as barriers to infection. The mechanism whereby they tend to fight infection has not yet been identified but observations have confirmed the view that children whose tonsils have been removed are more susceptible to infections than others. A body of opinion has, therefore, arisen which frowns upon surgical interference in obstinate cases of tonsillitis.

The onset of tonsillitis is manifested by a sudden pain in swallowing, a sensation of chilliness and fever. On visual examination the tonsils are found to be enlarged, engorged and covered with a varying amount of whitish or grey material, the purulent discharge. Inflammation is not restricted to the tonsils and generally the whole of the throat is involved. The glands under the jaws are also inflamed and tender to the touch. In severe cases there may be pain in the ear. These symptoms, particularly in children and adults upto the age of 18 years should not be ignored because they might be the precursor of rheumatic fever, a serious condition.

Ayurvedists call the disease as Tundikeri or Galayu which is usually associated with attacks of cough and cold. Constipation and other disorders of the digestive system are liable to precipitate the attack. In severe cases there may be difficulty in breathing too in addition to fever and a coated tongue.

Treatment: The treatment of tonsillitis must start with hot fomentation of the front of the neck and steps should be taken to keep the region warm. Twelve grammes of Banafsha flowers (*viola odorata*) boiled in 50 ml. of milk is a useful home remedy for tonsillitis. The milk should be filtered and drunk. The filtered Banafsha should be lightly fried in ghee and worn round the throat as a poultice at night. Decoction of the bark of the acacia (Babul) tree mixed with rock salt should be used for gargles. If that is not easy to come by, saline gargles should be resorted to. The powder of Vasti Madhu (*glycyrrhiza glabra*), Vacha (*acorus calamus*) and Kulanjana (*alipina galanga*) made into a paste with honey should used as a linctus. The drug of choice is, of course, Khadiradi Vati, recommended for intractable cases of cough. Six tablets may be sucked as lozenges throughout the day to get relief. Roots of Vacha (*acorus calamus*) and Sati (*curcuma zedoria*) may be ground in milk and a paste prepared. It can be used as nasal drops to relieve the congestion of the nose.

In chronic cases, Agastya Rasayana, used in bronchitis is of immediate help. It should be taken twice daily with honey. A continued use of the drug for about six months will grant immunity from the disease for life.

Soup of meat and lentils like moong are recommended for patients suffering from tonsillitis. Bland, soft

foods, gruel and lukewarm liquids are the best. Chillies and other condiments should be avoided as they tend to irritate the throat. Vegetables like bitter gourd. fenugreek (Methi), young radishes are particularly recommended. Sour substances, curds, butter milk and fried foods are to be avoided.

Throat complaints like pharyngitis and laryngitis are generally present in all inflammations of the throat whether they are in the form of tonsillitis or otherwise. Their end result is, generally speaking, a hoarseness of voice, which we deal here.

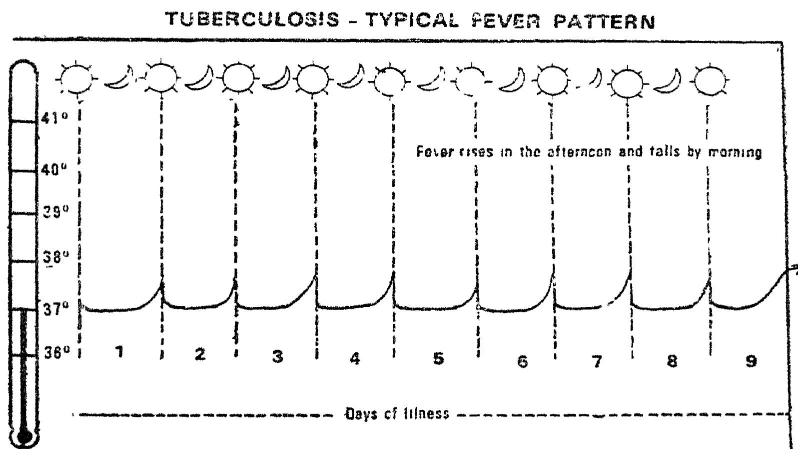
HOARSENESS

Symptoms: Swarabheda, as hoarseness of voice is called in Ayurveda, is a complaint which accompanies or results from laryngitis (the inflammation of the larynx). It may be caused by certain infections or taking, alternately, of hot and cold substances, any abnormal growth and infections produced by chronic tuberculosis. In addition to difficulty in articulation, the patient suffers from a coated tongue, pain in swallowing and, sometimes, fever and a burning sensation in the throat. Constipation tends to aggravate the condition.

Treatment: Khadiradi Vati or Eladi Vati (the former has been recommended for tonsillitis and other swellings of the throat) should be sucked as a lozenge. Powder of Vasti Madhu and Vacha should be given in one teaspoonful doses thrice a day with honey. Saline gargles or gargles with the decoction of the bark of the acacia tree are recommended as a palliative. Chillies and other condiments should be avoided, as also sour things and heavy, fatty foods.

TUBERCULOSIS

Causes and Symptoms: Tuberculosis, or TB in popular parlance, is the general name for the group of diseases caused by the tiny organism, *mycobacterium tuberculosis*, of which pulmonary tuberculosis, or phthisis, is the most important. Little lumps, or tubercles, form in the part affected which become soft and suppurate as the disease advances. Slight rise of temperature, generally in the evenings, night sweats, discharge of blood with phlegm and extensive bleeding from the lungs in the final stages brings on death. It is one of the most highly contagious diseases which have afflicted mankind. It may affect the bones, the membranes of the brain, leading to meningitis, or the glands when it is called scorfula. It may be caused when a person pricks himself with anything sharp infec-



ted with the germs, or inhalation of dust particles mixed with the tiny microbe. But the main factor responsible for the disease is the susceptibility to it, as a constitution weakened by continuous ill-health, a lowered power of resistance, heredity, an unhealthy atmosphere, excessive use of intoxicants, over-indulgence in sex, asthma and diseases of the metabolism like diabetes. It is a disease of filth and poverty and does not attack persons living in clean surroundings and having sufficient means to feed themselves properly.

Ayurvedists call TB Rajyakshma, the king of disease. Moon, the king among the satellites of the earth, according to our mythology, was supposed to have been afflicted because of a curse of Brahma, the creator and hence the name, Rajyakshma.

In the early stages of the disease, there is an irritating cough, particularly in the morning, either without an expectoration or with a clear mucus or phlegm. The first sign of the disease is a blood-flecked phlegm attended by fever in the evenings and below normal temperatures in the early morning and also night sweats. When the symptoms are aggravated and emaciation has set in, the second stage is supposed to have been reached. If extreme care is not taken and treatment is not initated, it may spread to the throat and the intestines. The terminal stage comes when the illness reaches deep into the lungs and they are full of cavities. The voice of the patient may become husky at this stage, there may be diahorrea and extreme prostration, with the patient being unable to leave the bed. Death comes because of extensive haemorrhage.

The duration of the illness depends on four factors: (i) the intensity of the infection; (ii) the age of the patient; (iii) the stage at which the disease has been recognised; and (iv) the natural resistance of the body.

If the disease reaches the intestines, there is inflammation of the bowels with impairment of digestion, loss of appetite, distension of the stomach, rumbling noises in the abdomen and a persistant ache. If the small intestine is involved, the patient is constipated but when the large intestine is the seat of the malady, diahorrea is the result. Emaciation increases faster than in pulmonary TB. In scorfula, or TB of the glands, inflammation is the chief characteristic. Tumours form and they suppurate giving a foul smell When the disease attacks the bones, the bones start crumbling and a state known as caries of the bones results. If it reaches the spine, there is curvature and the patient is unable to stand erect. TB of the bones affects young people, but there have been and are cases of senile tuberculosis of the bones—the bones affected are, generally speaking, the femurs and the tibia..

Treatment: Treatment of tuberculosis has two aspects: (1) preventive, and (2) curative or remedial. The preventive aspect is more social than medical. It is from the slums that the disease starts its fatal march. Provision of clean, healthy surroundings with properly ventilated and clean houses is the first imperative. Detection and isolation of the victims of the disease is the second most important thing that can be done. Thirdly, the diet is of primary importance. Plenty of milk, butter, eggs, black gram or its pulse, gourds of the various varieties, turnips, beet root, spinach and other green vegetables, fruits, etc. are the other preventives. As has been stated earlier, it is a disease of filth and poverty. Clean surroundings and provision of healthy houses is a must if TB is to be prevented.

The treatment of a case of tuberculosis must start with the isolation of the patient and his removal to a

sanitorium if the disease has been detected at a secondary stage. If that is not possible, he should be housed in an airy room where there is plenty of sunlight. Sunlight, because the germs causing the disease fall victim only to direct sunlight; neither boiling, nor freezing makes them ineffective.

Ayurveda recommends Vasa (*adhatoda vasica*) for tuberculosis. One ounce of the juice from the leaves of the drug given thrice in the day with honey provides relief. But the drug of choice is Naradiya Mahalakshami Vilasa Rasa which contains traces of gold. It should be administered in three doses of three grains each in the day. Swarna Vasant Malati is the drug in cases where there is excessive fever, sweating and burning sensation on the palms of the hands and the soles of the feet Rudanti (*cressa cıestca*) given in 2 gm. doses twice daily reduces the virulence of the disease.

Garlic is another wonderful drug in the cure of TB. Thirty grains of garlic boiled in about eight ounces of milk and two pounds of water should be administered in two doses in the day. But the medicine is ready only when the whole decoction has been reduced to one fourth of its original quantity.

Drakshasava should be administered in one ounce doses after meals. It should be mixed with an equal quantity of water. Chyavanaprasha Avaleha is another wonderful remedy to give strength and sustenance to the patient. The dosage in the beginning should be two teaspoonfuls with milk on an empty stomach twice daily, but as the patient gains strength, it should be increased. Long pepper in powdered form should be given in one teaspoonful doses twice daily.

In the initial stages of the disease, when there is dry cough, fever in the night and weakness, the following medicines should be given:

Suvarna Vasanta Malati Rasa	250 mg.	It should be administered with preserve (*murabba*) of amla, thrice daily
Praval Pishti	500 mg.	
Amritasatva	250 mg.	

In cases of high temperatures of tuberculosis, the following prescriptions should be helpful:

1.	Muktapanchamrita	120 mg.	To be taken morning and evening with honey.
	Pachanana Rasa	120 mg.	
	Amritasatva	240 mg.	
2.	Chandramrita	1 gm.	To be mixed with honey and to be used as a linctus
	Sitopaladi	12 gm.	

In case there is bleeding present the following drugs would be more helpful:

1.	Vasantamalati	120 mg.	To be taken thrice with honey
	Raktapitta Kulakandana Rasa	120 mg.	
	Shatamulyadi Loha	240 mg.	
	Lakshadi Churna	1 gm.	
	Sitopaladi	1 gm.	
2.	Swarnamakshik Bhasma	120 mg.	To be taken in morning and evening with goat's milk
	Praval Pishti	240 mg.	
	Vasavaleha	10 gm.	

Dried fruits, particularly dried grapes, almond oil, etc. are useful in this condition. Drumsticks, patola and kundru are the best vegetables recommended for a consumptive patient. Products of the goat, its milk, flesh and even urine, are useful for a TB patient. Subs-

tances which aggravate Kapha, like curds, butter milk, bananas and guavas should be banned. No hard physical or mental exercise should be permitted. Living in airy surroundings and going for walks in the morning and evening should be recommended. Sexual intercourse should be avoided as it is likely to aggravate the condition.

HICCOUGH

Symptoms and Causes: Hiccough or Hikka Roga, as it is called in Ayurveda, is a spasmodic indrawing of air to the lungs, ending with a click, due to sudden closure of the vocal chords. The cause, generally, is some irritation of the nerves which go to the diaphragm producing sudden contractions of the latter. Most cases are due to disorders of digestion, but the symptoms also occur in some serious diseases like the uraemia of Bright's disease and typhoid fever. In such cases it is a grave sign.

According to Ayurveda, the aggravation and upward movement of Vayu is the primary cause of hiccups. A dietary irregularity or indiscretion, psychic factors like anxiety, nervousness and anger may also cause hiccups. The various symptoms are manifested, depending upon the Doshas involved.

Remedies: The ash of the peacock feather is a specific remedy for this condition. Two to six grains, depending upon the severity of the malady, are administered with honey six times in the day. Eladi Vati, the chief ingredient of which is cardamom, should be sucked six times in the day. Alternatively the tablet should be ground and mixed with honey and used as a linctus. Hingutriguna Taila should be used for massa-

ging the abdomen. Fomentation with a hot water bag is also recommended. Smoke from burning black gram and a piece of old rope should be inhaled in the beginning of an attack.

A standard Ayurvedic preparation, Sukumara Ghrita, is recommended in doses of one teaspoonful thrice a day with milk.

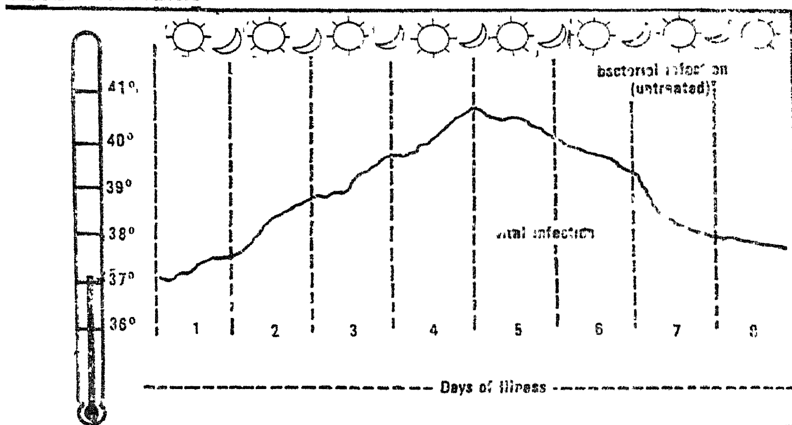
Psychotherapy is recommended if the condition is the result of psychological reasons. He should be advised to take rest and avoid worry. A few mouthfuls of water swallowed suddenly might also relieve the condition.

Fatty and heavy foods are to be avoided; light, liquid diet is recommended. If there is constipation present it should be relieved by administration of laxatives.

PNEUMONIA

Symptoms: Pneumonia is a disease caused by the inflammation of the lungs. As in most diseases, allopathy believes it to be caused by an organism, *pneumococcus*, which has an incubation period of two to six days. The attack usually begins with a fit of shivering, or in the case of children with convulsions. The temperature at once rises from 101°F. to 103°F., the pulse is rapid and breathing shallow and painful. There is coughing and the phlegm produced is sticky and, sometimes, flecked with blood. The temperature continues at about 104°F. for about a week after which it has a tendency to fall suddenly, with copious perspiration and a sinking feeling with extreme prostration. Pain which accompanies the onset of the disease may cease; it is generally on the left side, but is sometimes referred (or travels) to the pit of the stomach. It may confuse the physician

PNEUMONIA - TYPICAL FEVER PATTERN



to diagnose it to be of abdominal origin.

A pneumonia patient generally complains of sleeplessness and the affected side of the chest may stop moving during inspiration and expiration. The whole situation is compounded if both the lungs are affected and what is known as 'double' pneumonia develops. The disease sometimes leads to pleurisy, or inflammation of the pleura and collection of fluid in the pleural cavity, which is a serious condition.

Pneumonia is known as Shwasanak Jwara in Ayurveda, which is one of the fevers caused by the disturbance of the Vata Dosha in the body. The most critical period in the course of the disease is the crisis that occurs on the tenth day from the onset of the fever, when the temperature falls suddenly to normal. The patient perspires profusely and there is extreme weakness with feeble breathing.

Remedies: The following standard Ayurvedic

preparations would deal with pneumonia effectively.

The following prescriptions should be tried in the first stages of the diseases:

1.	Shringa Bhasma	120 mg.	To be administered
	Rasa Sindur	120 mg.	thrice daily with
	Shringrabhra	120 mg.	juice of ginger
	Narsar	240 mg.	and honey
2.	Ashtadashang Quath	50 ml.	To be taken once daily in the morning

If the breathing of the patient is shallow, the following remedies should be tried:

1.	Swash Kasa Chintamani	120 mg.
	Mayura Pichha Bhasma	120 mg.
	Rock Salt	120 mg.
	Pipli Churna	120 mg.
	Apamargakshara	360 mg.
	Kakarasingi Churna	5 gm.

This should be given to the patient four times in the day with honey.

2.	Chandramrita	0.5 gm.
	Yavakshara	1.00 gm
	Talishadi Churna	6.00 gm.

This should be mixed with 12 gms. of syrup of Lisora (*cordia mysa*) and used as a linctus.

At the time of the crisis (when the fever suddenly goes down) the following is the best prescription:

Visheshwar Rasa	120 mg.
Kasturibhairava	120 mg.
Saubhagya Vati	180 mg.

This should be given six times in the day with powder of cardamom and honey.

In case there is delirium, remedies like Vata Chintamani, Chaturbhuja Rasa, Shringabhasma, Tribhuvanakirti Rasa, Kasturibhairava Rasa, Naradeeya Laxmivilasa Rasa should be given. Dashanga Lepa should be used for managing the chest.

4

DISEASES OF THE CARDIO-VASCULAR SYSTEM

प्रतिष्ठार्थं हि भावानामेषां हृदयमिष्यते
गोपानसी नामागारकर्णिकेवार्थं चिन्तकैं ।

च० सं० 30 : 5

As the central girder supports the wood or bamboo frame work of thatch, so the heart represents the substratum of all the organs of the body. Even a small injury to the heart results in fainting.

In this chapter, we shall consider the diseases of the organs of the body which concern the manufacture, storage and circulation of the blood, the most vital fluid of the body. Any reduction in its quantity or disturbance of the balance among its constituents, or interruption in its circulation through the various organs of the body gives rise to diseases, some of which may be fatal.

The nutrition that the human body assimilates through the ingestion of food is turned into blood which courses through the different organs. It restores the tissues and replaces the energy that we lose through the use of our body. It is being constantly manufactured, purified and replaced. In a normal, healthy human body the amount of blood is nine per cent of the body weight. Its constituents, the red and white corpuscles and platelets, have their own allotted functions to perform. The red corpuscles act as oxygen carriers, the white corpuscles act as guards who fight

infection and the platelets help in the cogulation of the vital fluid in cases of injury. In the fluid, the main constituent of blood, are carried the various salts and proteins which nourish the tissues. In its downward journey from the heart, the pump which pushes it through the body, blood carries the various waste products like carbonic acid gas to be exhaled by the lungs, the urea and the salts to be removed by the kidneys. Blood forms a general medium of communication between the organs that are chemically interdependent: it carries to the stomach the materials for the gastric juice, to the muscles the ferments formed in the pancreas and absorbs secretions needed for the general purposes of the body, like those of the thyroid gland and the suprarenal glands.

According to Ayurveda, however, blood is the result of Ahara Rasa which is produced as a result of the assimilation of food. Ahara Rasa is driven by Prana Vayu through the vessels to the heart and from there carried to the different parts of the body. From the Ahara Rasa are produced the different Dhatus of the body, the first of them being the Rasa Dhatu, the raw material of blood.

The heart, according to the Kedari Kulya Nyaya (irrigation channel analogy), is like a tank, the Ahara Rasa like the water, the Dhamanis (blood vessels) the water channels. The Ahara Rasa is not returned to the heart, according to this theory, but fresh Rasa manufactured from the food that is digested.

We shall first deal with the primary organ, the liver, which is the storehouse of nourishment, which may be loosely translated as the Ahara Rasa.

LIVER AND ITS DISORDERS

The liver is a vast chemical factory; the heat produced by the chemical changes taking place in it forms an important contribution to the general warming of the body. It secretes biles (salts and pigments) and aids the digestion of fats. It stores the substance necessary for the proper functioning of the bone marrow in the manufacture of red blood corpuscles. It also manufactures the fibrinogen of the blood, stores iron and copper, produces peparin, detoxicates the



LIVER

noxious products made in the intestines and absorbed into the blood. It stores carbohydrates in the form of glycogen

The liver is the largest gland in the body and one of the five major organs which are vital to life. A malfunctioning of the liver may not become apparent immediately, unless, of course, the blood flow through it is impeded or the bile ducts are obstructed. Nor does it recover quickly once a disorder lodges itself in the organ.

CIRRHOSIS OF THE LIVER

Symptoms: In cirrhosis of the liver the tissues are replaced by fibrous tissues similar to scar tissues. The colour of the organ turns from red to yellow and it contracts, blood vessels are depressed and dropsy results because there is deficiency of blood in the veins. Cirrhosis of the liver is of many types. It may develop among childern when it is known as infantile cirrhosis, but in adults it is generally associated with too much of alcohol drinking by the patient.

Cirrhosis of the liver manifests itself in the congestion of the organ and that results in loss of appetite. Diarrhoea and flatulence may follow and then pain in the region of the liver is noticed. Pressure of the expanding liver on the diaphragm, the muscular wall separating the lungs and the heart from the other organs in the abdomen, may cause difficulty in breathing and also cough.

The disease generally occurs because of a faulty diet among children; among adults it is generally the result of excessive intake of alcohol. The liver helps neutralise the toxic effects of substances ingested and if such substances are taken in excess, it may fail to meet

the demands made on it. The first thing that should be done before medication is started in a case of cirrhosis of the liver is to ban all intoxicating substances like tea, coffee, tobacco and alcohol.

Remedies: The best remedy for this condition of the liver is Bhringaraja (*eclipta alba*), a small herb which grows in marshy lands. The juice of the leaves, flowers, stems and roots of the plant is administered in doses of one teaspoonful thrice daily in the case of infantile cirrohsis. The juice should be mixed with honey to offset its bitter and astringent taste.

Katuki (*picrorrhiza kurroa*) is the drug of choice for cirrhosis among adults. The root of the herb which grows at high altitudes is given in powdered form. One teaspoonful of the powder mixed with an equal amount of honey is administered thrice daily. In case of attendant constipation, the dose should be increased to double and be given with a cup of warm water three to four times a day. It stimulates the liver to produce more bile, the excretion of which relieves congestion of the liver and the tissues which have become defunct start functioning again. A standard Ayurvedic medicine, Aarogyavardhani, a compound of Katuki and calx of copper, can be administered with advantage in cirrhosis of the liver. It has the property of reviving the cells which have become atrophied. A 250 mg. tablet of this medicine is available and two to four tablets should be given thrice in the day with a cupful of warm water.

Drugs prescribed for jaundice or hepatitis (Kamala in Ayurveda) are also helpful in a case of cirrhosis of the liver. But the main thing to be noted is that diet is more important than any medication in cases of diseases of the liver. All fatty substances and foods hard to

digest should be banned. Skimmed milk or goat's milk, juice of sugarcane, butter milk instead of curds, and garlic should be prescribed. In case there is accumulation of fluids in the region of the abdomen (dropsy), a salt free diet should be given to the patient. Constipation should not be allowed to develop at any cost even if it means a daily purgative or an enema. If the patient feels lost without intake of salt, he may be permitted to use a little rock salt—marine salt is like poison in ailments of the liver.

In addition, the patient should be advised to take complete rest. He should not sleep during the day, ride a vehicle which might jerk the whole body or take any violent exercise. The only exertion permitted is walking over a flat, even ground to avoid shaking the body.

JAUNDICE

Symptoms: Jaundice or Kamala—as it is called in Ayurveda—is a condition in which there is discoloration of the skin because of deposition of bile pigment in its deeper layers. It may be caused by inflammation of the liver, hepatitis, an infection or an obstruction of the bile ducts due to cirrhosis. It can also be caused by ingestion of certain poisonous substances the morbidity of which the liver is unable to deal with. Whatever the technical name, many diseases of the liver result in jaundice.

The yellow colour first appears in the whites of the eyes and then spreads to the whole of the skin. Excess of bile pigments (Pitta) circulating in the blood give the skin its yellow colour. Since the bile does not go into the intestine as it normally does, the stools of the jaundiced patient lose their typical brownish colour and in severe cases are almost whitish. There is loss of

appetite and impairment of digestion. The liver is unable to digest fat and there may be a sense of fullness all the time. Nausea may also be present in certain cases because of defective digestion. If the liver is inflamed (hepatitis), there is also pain in the region of the organ and it is tender to touch.

Treatment: The treatment of jaundice must start with purgation. The basic theory is that no burden be placed on the liver and for that a daily purgative (allopaths recommend a saline purgative) is recommended. A diuretic may also be administered to encourage the flow of urine which will expel most of the bile from the system. A popular nostrum for copious urine in a patient suffering from jaundice is to soak a piece of tender bark of the Peepul tree (two inches by one inch by six inches) in water overnight and drink the water in the morning.

Trivari (*operculina turpenthum*) and Kutuki (mentioned earlier while dealing with cirrhosis of the liver) are the two major drugs with which the treatment of jaundice should start. One to two teaspoonfuls of the powder of the drugs may be administered with hot water twice daily. The compound preparation used by Ayurveda for the treatment of jaundice are: Avipattikar Churna and Arogyavardhini Vati. The Churna should be given in one teaspoonful doses twice a day with hot water. The Arogyavardhini Vati is available in 250 mg. strength and two tablets should be given thrice daily with hot water or with honey. Other drugs used in the treatment of jaundice are: Vasaka (*adhatoda vasica*), Kakamachi (*solanum nigrum*) and Triphala (the three myrobalans).

Sweet substances and liquids like sugarcane juice, fruit juice and dry grapes should form the mainstay of

the patient's diet. Drugs to induce more urination are helpful in expelling excess bile from the blood. The nostrum mentioned in the section on cirrhosis of the liver (tender bark of the Peepal tree soaked in water overnight and thrown away and the water for drinking with addition of sugar) is helpful in severe obstruction of the bile ducts. Spices, fats, alcohol and tobacco are contraindicated. Butter milk is the best drink for a patient suffering from jaundice.

ANAEMIA

Symptoms and Causes: Anaemia—the lack of red blood corpuscles and haemoglobins—is called Pandu Roga in Ayurveda. It may be caused by (1) loss of blood through excessive menstruation, injury, child birth, bleeding from the gastro-intestinal tract, due to certain diseases like purpura and haemophilia which are characterised by bleeding; (2) defective blood formation because of infections, toxins and drugs; (3) inadequate intake of iron; and (4) defective absorption of substances in the diet which enrich the blood. Some anaemias are due to a combination of more than one of the causes enumerated above.

The most striking symptom of anaemia is pallor of the skin, hence the Ayurvedic name, Pandu Roga. The best guide, however, is the colour of the internal lining of the eyelid. There is weakness and giddiness, breathing is shallow, the pulse rapid and the blood pressure low. In severe cases. the tongue is often sore and the nails of the fingers brittle and concave instead of being convex. If the disease is ignored, it may turn into pernicious anaemia which is more difficult to cure In some severe cases, the patient may have to be given a blood transfusion to make up the loss of blood, as

happens in traumas like severe haemorrhage due to injury or bursting of an ulcer in the abdominal region.

Before treatment can be started, the exact cause of the malady should be ascertained. If it is of a mild nature and has been caused by insufficient nutrition, massive doses of the substances lacking could handle it But if it is due to malfunctioning of the liver, the stomach or the bone Marrow, Punarnavadi Mandura or Punarnava Mandura are the medicines of choice. Fifteen grains of the Mandura should be given with honey four times a day. For children the dose can be suitably reduced. The main ingredient of the drug is Punarnava (*boerhaavia diffusa*) which has rejuvenating qualities Given to healthy persons it acts as an elixir.

Vyoshadi Ghrita, Phaltrikadi Kashaya, Pandu Panchanana Rasa and Lauhasava are some of the other drugs and standard Ayurvedic preparations useful in anaemia. Fresh liver of goat, lightly cooked and fresh blood of goat or rabbit can immediately help fight the severity of anaemia.

Fruit juices, milk, meat soups, green vegetables and light foods free from fats and sour substances are recommended for an anaemia patient. Sweet mango is like nectar for such a patient. It the patient is constipated, purgatives are indicated because anaemia is born of Pitta which can be corrected through purgation. Triphala water (the three myrobalans soaked in water) is the best remedy for such a constipation.

LEUKAEMIA

Symptoms: Leukaemia, or Vatolvana Sannipataja Panduroga in Ayurveda, commonly known as cancer of the blood, is a disease, usually of chronic type, in which the number of white corpuslces of the blood is

permanently increased. In many ways it resembles a form of malignant disease.

In acute cases of leukaemia, which are rare, the patient shows pallor, occasional purpuric rash, and enlargement of the lymphatic glands and spleen. The temperature is raised and the condition is liable to be mistaken for general TB. In the chronic type of leukaemia, which is the usual type, the onset is gradual and the usual symptoms are either swelling of the abdomen or shortness of breath, due to painless enlargement of the spleen, or of the glands in the neck, armpits. There is a pallor of the skin, palpitation and other symptoms of anaemia. There may also be occasional haemorrhages from the nose, stomach, gums or bowels. There is dropsy of the feet, diarrhoea and also a slight degree of fever. The life expectancy of the patient is not more than a few years if the disease is not treated in time.

Treatment: There is no known cure for leukaemia in allopathy. Modern medicine has failed to come up with any explanation as to why the white blood corpuscles multiply fast giving rise to the complications mentioned above. Ayurveda, however, believes it to be caused by a vitiation of all the three Doshas, namely, Vata, Pitta and Kapha, and seeks to cure it with drugs which restore the balance of the three.

For acute cases of leukaemia, the following are prescribed:

Bajra Bhasma (calx of diamond)	5.8 mg	Thrice daily
Muktapishtha	60 mg.	
Pandupanchanan Rasa	120 mg.	

In chronic cases of leukaemia, the following drugs are useful:

Bajra Bhasma	5.8 mg.	Thrice daily
Yakritaplihodarariloha Rasa	120 mg.	
Pandupanchanan Rasa	120 mg.	

In addition to the above, a decoction of fresh liver juice and turmeric, should be given.

Periodic transfusions of blood may also be necessary in chronic cases of leukaemia.

Other drugs recommended in leukaemia are: Vishadi Churna, Davyardileha, Chandrasuryatmak Rasa, Trailokyasundar which are prescribed in pernicious anaemia.

The patient suffering from leukaemia should be advised to eat old rice, oats, moong dal, vegetables like raw banana, gourds, spinach, raw papaya, radish, onions; amla, figs, oranges, apples, grapes; meats like fresh liver grilled over an open fire, butter, meat soups, butter milk and ghee. Fresh blood of goat and rabbit, taken in doses of 50 to 100 ml. doses is also helpful in curing acute cases.

HAEMORRHAGE

Symptoms and Causes: Haemorrhage means any escape of blood from the vessels which normally carry it. It may be external, as in the case of an injury, or internal, which may be due to an injury sustained in an accident, by a blow as in a fight, or due to the bursting of an ulcer in the stomach, or due to some other disorder of an internal organ. Arterial haemorrhage is more serious than venous: the blood from an artery is bright

in colour and comes out in spurts corresponding to the heartbeat. The haemorrhage from a vein is slow and the blood dark in colour. In the case of a large artery being involved as the femoral artery, the blood loss is so rapid and copious that unless treated in time, the patient may not have long to live. Small arteries, when cut, may automatically close after some time, due to their tendency to retract into the surrounding tissues, but surgical interference is necessary in the case of large arteries being torn. Venous haemorrhage can be controlled by applying pressure in the affected area. In serious cases of blood loss, the patient may have to be hospitalised for blood transfusion to make up the loss of the vital fluid.

Haemorrhage may be in the form of haematemesis (vomiting of blood) or sudden discharge of blood from other orifices of the body, as in piles. Ayurvedic theory ascribes bleeding to Rakta Pitta, or the vitiation of the Pitta in the blood. That is why the Ayurvedic practitioners would not immediately stop the bleeding in a healthy individual. It is the vitiated blood, full of toxins which is the first to come out of the body in a case of haemorrhage and should be allowed to flow for some time, of course, in view of the patient's physique. If the bleeding is checked immediately, it might give rise to other disorders such as fainting, fever, loss of appetite, and other ailments.

Remedies: In haematemesis (vomiting of blood), the drug of choice is Amalaki (*emblica officinalis*): juice of this fruit should be given in one ounce doses thrice a day. Similarly, juice of Kushmanda (*benincasa hispida*) could be administered in one ounce doses thrice daily. Alternatively, Pravala Pishthi may be administered in 15 grain doses thrice in the day. For

checking the bleeding, iced or refrigerated water should be given.

In other cases of Rakta Pitta, Raktapittakulak-and Rasa is a better remedy: it should be given in doses of 250 mg. to 1 gramme thrice daily. Pittantaka Rasa, Chandrakala Rasa, Ushirasava and Mahapittantaka Rasa are some of the other Ayurvedic remedies useful for this condition.

Regimen A strict regimen of diet and abstinence from foodstuffs which may aggravate Pitta is as important as the drugs prescribed above. The patient should be advised to take complete rest and stay in a cool atmosphere; in summer, he should migrate to a cold climate. Fruits like amla, dates, pomegranate, orange, apple, banana, grape and dried grapes; juices of sugarcane, water of coconut; and non-irritating vegetables are recommended. In case of internal haemorrhages, he should be warned to learn to recognise the signs of excessive bleeding; they are: palpitation, a sense of unease, weakness and profuse sweating. If the blood pressure of the patient has fallen considerably and continues to fall, immediate recourse to blood transfusion must be taken to save his life.

HYPERTENSION

Causes and Symptoms: Hypertension (Raktavata) or high blood pressure, is a disorder characterised by more than normal pressure at which the blood is being pumped by the heart. The main function of the heart is to pump blood into the arteries and to receive the blood that comes back to it after having completed a circuit of the whole body within fifteen seconds. With each beat of the heart the blood is pumped out to the

various organs through the arteries. When there is a disorder of the arteries—e.g., arteriosclerosis (hardening of the arteries or deposition of fat in their insides) they are unable to contain the amount of blood that is necessary for a normal functioning of its ci·culation throughout the body, with the result that the heart is strained and it works overtime to maintain the required amount of blood. In that process it pumps with greater vigour and what is known as 'high' pressure of the blood is caused.

The normal pressure in a healthy adult is generally taken as to be about 140 to 150 mm. of mercury (systolic) and 80 mm. (diastolic). Depending upon individual constitutions, any variation from the normal gives rise to symptoms like headache, a sensation of singing in the ears, pressure in the frontal region of the head, palpitation and a general feeling of unease. Hypertension may be categorised as (1) essential and (2) functional. It may be caused in the latter case as a result of malfunctioning of the kidneys giving rise to a high urea content in the blood. Stress or anxiety may be the other causes of functional hypertension.

According to Ayurveda, however, hypertension is a result of vitiation of Vayu. Excessive use of alcohol and other intoxicants, salt, lack of exercise leading to continuous inactivity of the heart muscle under conditions of stress may also cause—other things being equal, of course,—hypertension. Ayurveda calls the disease as Raktavata.

Cardinal symptoms of hypertension are: inability to sleep well, palpitation, giddiness, weakness and impairment of digestion. If the disorder becomes chronic due to carelessness or lack of proper medication, the capillaries supplying blood to the retina may become disordered and there may be impairment

of vision. If the blood supply to the brain fails as a result of high blood pressure, the patient may fall victim to a stroke. There may be cerebral haemorrhage, resulting in paralysis or even death.

Treatment: The treatment of hypertension must start with a proper diagnosis of its origin. If it is secondary, i.e., caused by some other disease like those of the kidneys, treatment of that malady should be started. But if it is of primary origin, a course of treatment to correct the balance of Vata or Vayu must be initiated, because all the drugs which alleviate Vayu are beneficial in this condition. Lahsuna, or garlic, is the most important substance helpful in controlling blood pressure. A paste made of about 15 grains of garlic mixed with a glass of butter milk taken twice a day will help bring the blood pressure to normal. Garlic may be fried in ghee if the patient finds the smell offensive, but the medicinal properties of garlic tend to be destroyed with boiling or frying. It should, therefore, be taken raw. Small cloves of garlic (there is a variety which resembles onions) are more helpful than the regular variety. A few cloves of garlic taken raw on an empty stomach in the morning will correct any vitiation of Vata whether it is flatulence (wind in the stomach) or blood pressure.

Sarpagandha (*rauwolfia sepentina*) is another drug used in Ayurveda for the past many centuries for the treatment of hypertension. Modern medicine has successfully isolated the alkaloids of this drug and it is being used extensively by the allopaths. Ayurveda, however, prefers to use the root of the drug in a powdered form. The usual dose is half a teaspoonful of the powder thrice a day. The alkaloids used by the practitioners of modern medicine have some harmful

side effects which are not present in the powder of the root the overdose of which will not have any harmful effects. The following prescription is of special significance in the treatment of hypertension:

Rasaraja	60 mg.	To be administered thrice daily with juice of amla or honey
Pravalapishta	120 mg.	
Maheshwar Rasayana or Sarpagandha	750 mg.	

Alongwith this the powder of Harada (1 gm.) and husk of flea seed (4 gm) should be taken at night with water or milk. This will help contain constipation and the bowels will remain clear. If there is dyspepsia alongwith hypertension 3 gm. of Yamanishadava may be given twice after meals with water.

Dhara therapy is also helpful in dealing with obstinate cases of hypertension. Oil boiled with Bala (*sida cordifolia*) and milk is allowed to drop in small droplets on the forehead of the patient from a height. The vessel containing it may be suspended from a hook or from the ceiling. The oil drips on the forehead of the patient between the eyes. The same oil may be used for purposes of massage of the patient's body, particularly the head. Satavartila Kshirabala Taila may be given internally in five drop doses with a cup of milk.

Diet: The patient should be kept on a low-fat diet: hydrogenated oils and saturated fats must be avoided at all costs. Butter and ghee prepared from cow's milk is allowed. Vegetables like bitter gourd and other varieties of gourd, drumsticks should be allowed. The best diet for a patient suffering from hypertension is, of course, boiled vegetables and fruits. Carbohydrates are best

avoided as they create digestive complications in such patients. Complete rest should be advised: the patient must try to sleep early and keep regular habits. Violent exercise should be avoided. A slow walk in the morning is the best exercise for such a patient.

LOW BLOOD PRESSURE

Symptoms: If the pressure of the blood being pumped by the heart into the arteries falls below the average 140 (systolic) and 80 (diastolic), there may be increase in the pulse rate, cold sweats, a feeling of extreme weakness and giddiness. Low blood pressure (Nyuna Raktachap) may be caused by: (1) injury leading to loss of blood; (2) food poisoning; (3) anaemia, acute or chronic; and (4) other disorders. If the pressure remains a little lower than the average it is a healthy sign, because in moments of stress the heart will be able to deal with any emergency. But if it falls below the minimum necessary for sound health, it should cause worry. The first requirement is to ascertain the cause of the malady. If it is anaemia or sudden loss of blood, these conditions should be treated first. Severe blood loss, as in an injury, may necessitate transfusion of blood. Low blood pressure due to anaemia can be cured only when the persistent lack of blood in the system has been dealt with. For persistent cases of low blood pressure the medicines mentioned in the section dealing with anaemia should be administered.

Remedies: Administration of brandy or alcohol of any variety in quantities from 15 to 50 ml., diluted with warm water, is a temporary expedient which can be tried till the exact cause of the malady is ascertained.

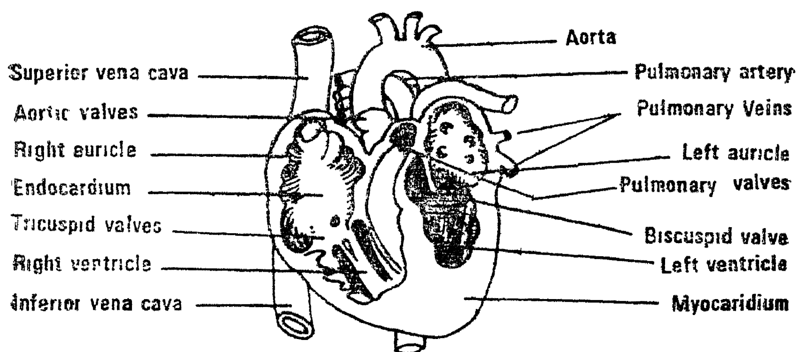
Low blood pressure is also a disorder caused by the vitiation of Vayu and can be treated with drugs which correct the balance of this Dosha in the body. A patient suffering from it should be given a balanced, nutritious diet, full of proteins and carbohydrates. Dry fruits, cheese, flesh of chicken, pigeon, rabbit and goat—in that order—soups of meat and black gram, fruits like mango, banana, apple, grapes and leguminous vegetables, e.g., beans of all varities, should be the mainstay of the diet of a patient suffering from chronically low blood pressure. He should avoid vigorous exercise and excessive sex. Intoxicants like alcohol and tobacco may be permitted in moderate quantities.

HEART DISEASES

We have dealt with the various disorders of the blood in this section: now we come to the main organ which is responsible for the circulation of the blood, the heart.

The heart is a hollow, muscular pump with four cavities, each provided at its outlet with a valve, whose function is to maintain the circulation of the blood. It beats at the rate of 72 per minute in a healthy adult with the rate of respiration being one fourth. It pushes the blood into the arteries which is returned to it through the veins to be sent out again. It completes the circulation of the blood in 15 seconds flat.

Many Diseases: Diseases of the heart are many, depending upon which part of the organ is affected. The two commonly known diseases are: (1) angina pectoris, which is characterised by intense, breath-taking pain, with a feeling of constriction across the



HEART AND ITS CHAMBERS

chest, choking, cold sweats and a feeling of impending death; and (2) a heart attack, a generic term for the failure of the function of the heart which may be ascribed to any one of a dozen or more disorders. But, considering the arduous work which this organ does constantly, and the fact that it never rests completely from the time of its formation till death, it is subject to very few disorders. If the diseases of the heart are caused by inflammatory affections, they may be any of the following: (1) pericarditis (swelling of the sheath in which the heart is encased); (2) myocarditis (the muscular substance); and (3) endocarditis (inflammation of the lining membrane). Hypertrophy is a condition in which the heart is enlarged and its wall thickened. Degeneration of the heart consists in degeneration of the muscular tissues resulting in enfeeblement of the heart's action. The other group of causes

are termed functional disorders of the heart. They are: (1) techycardia (faster than normal beating of the heart or palpitation); (2) arrhythmia (irregular heartbeat); (3) angina pectoris (pain in the region of the wishbone) due to narrowing of the arteries. Diseases like rheumatism and syphilis can also give rise to heart diseases. Of these the former (rheumatic fever to give it its proper name) generally strikes children and seldom adults above the age of 18. Syphilitic heart is the result of a veneral disease to which all are prone. Sometimes, functional hypertension caused by the stress of modern life, a sedantary life and irregular and unwise diet, alcohol and other intoxicant substances may lead to a serious cardiac disorder leading to what is known as a heart attack. Diptheria, TB and disorders of the thyroid glands may also lead to diseases of the heart. Congenital defects in the formation of the heart at birth may also lead to a heart condition. Beri beri (an acute deficiency of B^1 vitamin) may also cause a heart attack.

Causes and Symptoms: According to Ayurveda, when the Vayu is vitiated and disturbs the balance of Rasa dhatu in the body, the various diseases of the heart are born. Heart diseases in Ayurveda have been classified according to the Dosha, the vitiation of which has caused them. They may be caused by Vayu, Pitta, Kapha, all the three Doshas taken together and certain organisms. The symptoms of the various disorders, in brief, are:

Pericarditis: slight swelling on the face; quickened pulse; fever; dry cough; pain in the left region.

Endocarditis: Fever; emaciation; profuse sweating; cough; rapid and shallow breathing.

Angina, of effort, Spasmodic and Angina Innocens: acute pain in the centre of the chest, which travels to the left arm, sometimes to both the arms; sudden onset of pain; feeling of constriction across the chest; a pale, slightly swollen face; disorientation; fainting, onset of the attack after exertion; palpitation; foreboding of impending death.

Coronary Thrombosis (blocking of the artery because of a blood clot): fainting; profuse sweating; cynosis (blueness of the face and extremities); intense pain; the attack lasts from a few hours to a few days.

Cardiac Hypertrophy: extreme prostration; exhaustion and other connected symptoms; sometimes the compensatory mechanism masks the presence of the disease leading to a final, massive atttack which is usually fatal.

Cardiac Dilation (dilation of the heart): hammering of the pulse in the region of the neck; inflammation of the back and the legs; enlargement of the liver; dyspepsia.

Chronic Pericardial Effusion: continued irregularity of the pulse; palpitation, distressed breathing; a diagnosis is possible only through X-Rays.

Altered Heart Sounds, due to defects in the valves of the heart, leading to cynosis and other troubles.

Techycardia and **Arrhythmia**: fast and irregular pulse causing distress in breathing; fear of impending death.

Extra Systoles: in this disorder, the heart does not contract in its entirety leading to difficulty in breathing; feeling of heaviness in the region of the heart; hiccups.

Bradycardia (less than normal pulse beats per minute, leading to a suspicion that the heart is about to cease functioning): the pulse rate in this disorder

is 40 to 50 per minute. It may be found in athletes, where it is a sign of extraordinary health; among weak and emaciated persons and in case of a heart block, in which case it is a serious disorder.

Heart Block: An ordinary attack may lead to near unconsciousness with dark spots before the eyes, before the patient is compelled to lie down. In a serious attack, there is usually a total lack of consciousness, stoppage of breathing, cynosis, dilation of the puplis; rigor. The pulse stops beating for a brief period and the jaws become slack. Heart beats may be discerned after some time when the heart rate is usually 20 to 30 per minute. Sudden lack of blood in the region of the brain is the primary cause.

Treatment: In general cases of heart ailments the following prescriptions are useful:

1.	Nagarjunabha Prabhakar Vati Kukumbhadi Churna	120 mg. 240 mg. 1 gm.	To be taken twice daily with syrup of pomegranate
2.	Parthadyarishta	24 mg.	To be taken twice after meals with rose water
3.	Arogyavardhani Hingugragandhadi Churna	500 mg. 2 gm.	To be taken with water before sleep

In cases where the heart disease (whatever the technical name) is caused by vitiation of Vayu, the following drugs are recommended:

1.	Makaradhwaja Chintamani Rasa Shringa Bhasma	60 mg. 120 mg. 240 mg.	To be taken twice, morning and evening

2.	Pushkaramuladi Churna	1 gm.	To be taken twice after meals with Vallabhaka ghrita or fermented carrots (kaanji)
3.	Visheshwara Rasa	120 mg.	
	Hritpatri Churna (digitalis)	120 mg.	To be taken with sugar candy (mishri) last thing at night

In heart disease caused by vitiation of Pitta, the following are the drugs of choice:

1.	Panchanana Rasa	120 mg.	To be taken with cold water in the morning and evening
	Vyomashma Pishti	120 mg.	
	Drakshadi Churna	2 gm.	
2.	Arjuna Ghrita	12 gm.	To be taken once in the morning with mishri and cow's milk

If the heart ailment has been caused by the vitiation of Kapha, the following should give complete relief:

1.	Hridyarnava Rasa	120 mg.
	Shankar Vati	120 mg.
	Pipplimula Churna	500 mg.
	(powder of seeds of cardamom)	500 mg.

2.	Arjuna Churna Krishnadya Churna	1 gm. 2 gm.	To be taken with warm water after meals twice in the day.
3.	Makaradhwaja Prabhakara Vati Arogyavardhini	60 mg. 240 mg. 500 mg.	To be taken with decoction of Triphala once before sleep.

If heart trouble is due to vitiation of all the three Doshas, the medicines of choice are:

1.	Ratnakara Rasa Mukta Pishti Pushkaramula Churna	120 mg. 120 mg. 500 mg.	To be taken with Arjuna ghrita in the morning and evening
2.	Chandrodaya Yakuti Digitalis Powder	60 mg. 120 mg. 120 mg.	To be taken twice in the day

A strict regimen must be prescribed for a person suffering from any of the heart ailments mentioned above. He should never strain his heart; after an attack, he must be given complete bed rest. His diet should consist of fat free foods which can be easily digested. It would be better if he can take a salt free diet. Liquid diets like vegetable and meat soups, juices of fruits and even vegetables (e.g., of carrot) should be taken. The best regimen should be a boiled vegetables diet free from salt and other condiments. The patient should not be disturbed and no worries or strains should mar his daily routine. Exertion of any type should be prohibited. After the attack has passed, he can be allowed to walk a few furlongs. Care should be taken to keep his bowels clear so that no flatulence

forms in them as it is likely to depress the diaphragm which, in turn, can give rise to cardiac complications.

SCURVY

Symptoms and Causes: The last disease we propose to touch upon in this section is scurvy. It is characterised by extravasation of blood in the tissues of the body. It is mainly a deficiency disease and is rare except among the poor. In former times when not much was known about its causes, it used to strike sailors and others who had to subsist on tinned foods. Lack of Vitamin C produces this disease. It comes on gradually and the first symptoms are a failure of strength, breathlessness, exhaustion and mental depression. In later stages, there is bleeding of gums and a foul smell from the mouth. Acute deficiency of Vitamin C makes the capillaries fragile and their rupture is common leading to extensive haemorrhage and formation of glandular patches similar to boils all over the body, particularly in the lower limbs.

Treatment: Scurvy is easily cured. Modern medicine depends on massive doses of Vitamin C to cure the condition. In Ayurveda, however, the best remedy is Amalaki (the lowly amla), the richest source of Vitamin C which is not destroyed even on boiling as it is done in the case of other vegetables and fruits. Dried powder of Amalaki mixed with an equal quantity of sugar is administered in doses of one teaspoonful thrice a day. Alternatively, Chyavanprasha is given with milk thrice a day. This preparation has amalaki as its major ingredient.

Regimen: Fresh fruits and vegetables like cabbage, tomato, lemon and fruits like oranges and their juice is recommended for a patient suffering from scurvy.

Anaemia induced by scurvy can also be cured by the above drugs or.by the use of medicines indicated in the section on anaemia.

5

FEVERS

नवज्वरे दिवास्वपस्नान-भोजन-मैथुनम् ।
क्रोध-प्रवातव्यायाम-कषायांश्च विवर्जयेत् ।।
योगरत्नाकर 1: 266

When fever strikes, the patient should not be permitted to sleep during the day, bathe, eat, or have sexual intercourse, going out in the open where the winds blow strongly; taking exercise and eating of sour substances should also be prohibited.

The term fever may be defined as a condition of the body characterised by increase in temperature. The term has a very wide application as fever is one of the most common accompaniments of diseases in general. In many cases the fever must be regarded as secondary to and symptomatic of the disordered state with which it is found to be associated. In a large number of diseases, fever is the most predominant factor.

The average temperature of the body in health ranges between 98.4° and 99.5° F. (36 9° and 37.5° C.) and is liable to slight variations from such causes as the ingestion of food, the amount of exercise, and the temperature of the surrounding atmosphere. The lowest temperature of the body is between the hours of 1.30 A.M. and 7 A.M. and the highest between 4 P M. and 9 P.M.

If the fever reaches 106° F. (41.1°C.) the term hyperpyrexia is applied; it indicates a state of danger to the patient. If it exceeds 107° or 108° for any length

of time, dealth almost always ensures. Occasionally the temperature may attain the elevation of 110° to 112° F. prior to death. The onset of the fever is usually marked by a 'rigor' or shivering accompanied by pain in the back, headache, thirst and great lassitude. These symptoms may vary according to the type of fever. For example, a cardinal symptom of typhoid or enteric fever is a slow pulse in spite of the high temperature, whereas in an infection of the urinary tract, the pulse is too rapid as compared to the temperature of the body.

Even though fever is generally translated as Jwara, the connotation of the term jwara in Ayurveda is slightly different. It includes not only the rise in body temperature, but also the troubles that afflict the mind, the sensory organs and the body. Dehendriya Manastapi is the description of fever in Ayurveda.

Varities of Fever: Charak has categorized fever into as many as 32 varities depending upon the vitiation of the three Doshas, namely, Vata, Pitta and Kapha, the severity, the change of climate or seasons, the vitiation of the vital fluid, blood, and other supplementary reasons. According to modern classification the fevers are of the following types: (1) influenza; (2) pneumonia; (3) typhoid; (4) cerebro-spinal fever; (5) plague; (6) diptheria; (7) dengue fever; (8) sandfly fever; (9) yellow fever; (10) mumps; (11) rheumatic fever; (12) heat exhaustion and heat stroke; (13) small pox and chicken pox; (14) measles; (15) erysipelas; (16) hectic fever; (17) fever at the various stages and types of tuberculosis; (18) fever of dysentry; (19) malaria; cerebral malaria; (20) black water fever; (21) kala azar; (22) relapsing fever; (23) Malta fever; (24) rat bite fever; and (25) filaria.

Fevers are again classified according to their severity

and duration. Ayurvedic acharyas have specified the various Panch Karmas—induction of sweating, emesis and purgation, enema, etc.—for the various fevers and the stages at which they come to the notice of the physician. In some fevers, the patient may have to fast or be kept on liquids, whereas in others soft foods might be permitted. In others, where there is no involvement of the digestive system, the physician may not prescribe any dietary restrictions. Some of the fevers we have enumerated above have been covered under the various diseases we have dealt with, e.g., tuberculosis and influenza. We shall here deal with specific fevers of the most common type.

COMMON FEVER

In the case of a common fever, where there are no side complications, or in fevers which are not due to any specific causes, the following medicines are of advantage.

Treatment: The Tulsi plant (holy basil) and its tender leaves are a specific for many types of fevers. During the rainy season when malaria and dengue fevers are common, some tender leaves of the plant boiled with one's daily tea would act as a preventive against fever. In the case of acute fever of unknown or unspecified origin, a decoction made of about 12 grammes of Tulsi leaves, boiled with half a litre of water, should be administered with milk, sugar and powdered cardamom to bring down the temperature. Powder of the root of the horse radish tree (shigru) is another remedy for common fevers in their preliminary stage. Powder of Indrani leaves is also efficacious in such fevers.

The following two prescriptions should deal with any ordinary case of fever:

1.	Mrityunjaya	120 mg.	To be taken thrice daily with warm water, milk or decoction of Tulsi leaves
	Godanti Bhasma	120 mg.	
	Pippali Churna	240 mg.	
2.	Tribhuvanakirti Rasa	120 mg.	To be taken thrice daily with warm water, juice of fresh ginger or honey
	Abhraka Bhasma	120 mg.	
	Amritasatva	240 mg.	

If the patient is constipated, costiveness must also be dealt with: Jwarakesari (one tablet) should be taken the last thing at night.

If the fever is very acute with all the attendant symptoms—i.e., if there is rigor or shivering, dryness of the throat and intense thirst, pain in the region of the chest or joints of the body, the following medicines should do the trick:

1.	Hinguleshwara	120 mg.	To be taken thrice daily with warm water
	Godanti Bhasma	120 mg.	
	Powder of black cummin seeds roasted over a hot plate	500 mg.	
2.	Kiratatiktadi Quath	50 ml.	In the morning with the medicines indicated above

In case there is diarrhoea present, alongwith intense thirst, insomnia, vomiting, profuse sweating and signs of delirium, or disorientation or even fainting fits, the following prescription would be more appropriate:

Sarvatobhadra Rasa	250 mg.	To be taken thrice
Godanti Bhasma	120 mg.	daily with warm
Amritasatva	240 mg.	water

Alternatively, Haritiki Churna (one gm.), Kutki Churna (one gm.) and Amaltas (3 gm.) may be given the last thing at night.

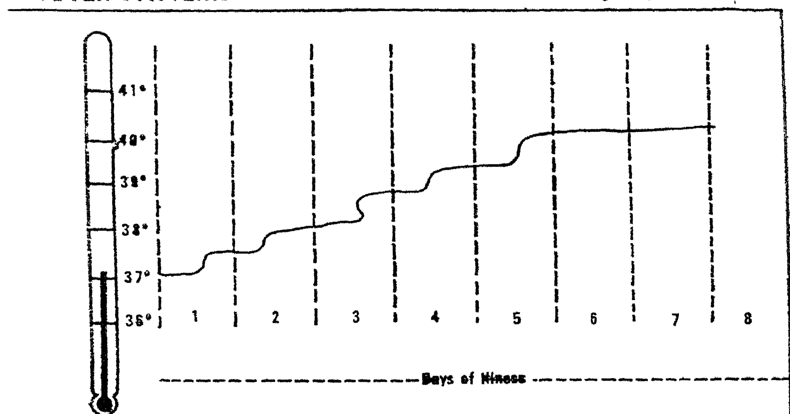
TYPHOID FEVER

Typhoid or enteric fever (from the involvement of the intestines)—Aantrik Jwara—is one of the more difficult fevers to deal with and has a tendency to emaciate the patient, if not checked in time. It has an insidious onset, there may be ulceration of the bowels or ulceration of the skin, mainly through eruptions and, of course, its tendency to relapse.

Causes and Symptoms: According to modern medicine, a bacillus, *salmonella typhi*, is the cause of the

TYPHOID - TYPICAL FEVER PATTERN

The fever goes up a little each day



disease. The fever comes on gradually, allowing the victim to move about normally for some days after the onset. The most marked symptoms are: headache, lassitude and discomfort, together with insomina and feverishness, particularly at night. In the beginning, the temperature is slightly higher than normal in the morning and worse in the evening. The fever increases gradually and the highest point is reached on the eighth day. The malady may continue for as long as three weeks or even 28 days. Relapses are not uncommon and have to be guarded against. A marked feature of typhoid is that the pulse does not go up corresponding to the body temperature as happens in other fevers. Of course, in protracted cases where there is extensive ulceration of the intestines, the pulse may become weak and rapid. From an early period abdominal symptoms show themselves in the form of distension of the region, pain and gurgling sounds when light pressure is exerted on the lower abdomen. Diarrhoea is a frequent, but by no means a constant, symptom.

If excessive ulceration of the bowels occurs, the peritonium may be perforated which is almost always a fatal symptom.

Treatment: According to Ayurveda, typhoid is the result of a vitiation of all the three Doshas in the body. In the first week, after it has been diagnosed as typhoid, the following medicines should be administered:

1. Mrigshring Bhasma 120 mg. To be given thrice
   Muktashakti Bhasma 120 mg. daily with honey
2. A decoction of Khub Kalan (12 gm) and dried grapes (10 grammes) with one litre of water, boiled down to about one third, should be given alongwith the above medicines.

In the second week, the following prescription should be given:

1.	Kasturibhairava Muktashakti Bhasma	120 mg. 12 mg.	Twice daily with honey
2.	Jwararyabhra Saubhagya Vati	120 mg. 240 mg.	Twice daily with juice of fresh ginger

In the third week the drugs to be given are:

1.	Vasantmalati Pravala Bhasma Amritasatva	120 mg. 120 mg. 120 mg.	To be given in the morning and evening with honey
2.	Sarvajwaralauha Pippli Churna	240 mg. 240 mg.	To be given in the morning and evening with honey

In the fourth week the best drugs are:

1.	Vasantamalati Navayasa Churna Sitopaladi	120 mg. 240 mg. 1.5 gm.	To be given in the morning and evening with honey
2.	Vishmushtayasava Lauhasava Amritarishta	5 ml. 10 ml. 10 ml.	To be given twice daily after meals

In addition, Mahalakshadi Oil should be used for massage of the body of the patient.

Diet: Diet during an attack of typhoid is of the utmost importance because of the involvement of the

intestines. Soft, liquid foods, particularly milk and fruit juices are the best. All irritating substances which are likely to disturb the digestive processes should be avoided. The main consideration is that there should not be any burden on the digestive system, nor should constipation be allowed to develop. A glycerine suppository may be resorted to in cases of constipation.

MENINGITIS

Symptoms and Causes. Meningitis or Mastishka Shoth is the inflammation of the membranes of the brain. It may be independently present or may be the result of such diseases as tuberculosis. In either case, the brain and, sometimes, the spine is involved. Its onset, except in the case of pneumococcal or tuberculous meningitis, is sudden, the temperature rising from 102° to 106° F. Vomiting, headache and shivering first appear, followed by the stiffness of the neck. In children convulsions are common. The patient may fall down suddenly and go into convulsions or he may go to bed and be found unconscious on the following morning. The patient is irritable and his body tender to touch. The limbs are so stiff that the bending of the lower limbs on the abdomen with the knees straight becomes impossible. The patient is often sleepless or even delirious. Sometimes red spots appear on the skin in which case it may be called 'spotted fever'. If unchecked, death may occur within a week from cardiac failure. The period of the meningitis or cerebro-spinal fever may last from 2 to 4 days to some months. The crisis, if it occurs, generally overtakes the patient in the first week. If he survives the first week, his chances of recovery are many.

The following medicines are indicated:

1.	Vata Chintamani	120 mg.	To be given thrice daily
	Kasturi Bhairava	120 mg.	
	Krishna Chaturmukha	120 mg.	
2.	Siddha Makaradhwaja	120 mg.	To be taken twice daily with juice of fresh ginger
	Saubhagya Vati	240 mg.	

In addition to the above medicines, Mahavishagarbha Taila should be used for massaging the back of the patient, particularly the spinal region. Diuretics (medicines increasing the flow of urine) should be used to help the patient to expel all the poisons from the body.

DENGUE FEVER

Symptoms: Dengue fever, Dandak Jwara in Ayurveda—also called Dandy fever, three day fever (from its duration) and Breakbone fever—is a disease of tropical and sub-tropical regions. Its onset is sudden and it is characterised by swelling and pains in the joints. Eruptions may also appear on the various parts of the body. Redness spreads over the face alongwith the above symptoms and the rash is like that of scarlatina. The throat is sore and the eyes run, with pain in the joints as well as the muscles of the body. The symptoms gradually pass off in three days leaving the patient very weak. Relapses generally take place and the malady may last as long as one month: dengue fever is not a fatal disease.

The temperature in this fever rises suddenly; before coming back to normal, it again goes up. That is why the temperature in dengue fever is called a saddleback type temperature.

Treatment: Hinguleshwar (120 mg.) and Shunthi Churna (360 mg.) should be given four times in the day with hot water. In case the temperature goes beyond 104°F., cold compresses should be applied. One should remember that over-medication in dengue fever is likely to lead to further complications. A mild attack of the fever may pass off without any drugs. The dietary restrictions are the same as in the case of other fevers. Diuretics and mild laxatives are recommended in case there is constipation. The patient should be kept on a liquid diet, preferably milk and fruit juices. Substances that are likely to irritate the digestive organs should be avoided.

DIPTHERIA

Symptoms: Diptheria—called Rohini in Ayurveda—is an acute infectious disease, accompanied by a membranous exudation on a mucous surface, generally on the tonsils and back of the throat or pharynx. Toxins in the exudation are likely to harm the heart muscle and the nerves. It begins as an inflammation of the throat and a false membrane develops choking the patient. It is predominantly a disease of the autumn and winter and, although it occurs at all ages, it is commonest in childhood. It is rare among infants upto the age of six months.

If the false membrane extends into the air passages, there is asphyxia or a general condition of collapse. The toxin of diptheria has a special predilection for the heart as it attacks it vehemently resulting in its failure. The temperature in this disease rarely rises beyond 103° F. but the pulse is weak and rapid, the countenance pale and the swelling of the glands in the neck increases rapidly leading to blood poisoning.

Treatment: According to Ayurveda, diptheria is the result of vitiation of Kapha. The following prescriptions are useful in dealing with it:

1.	Shuddha Visha	20 mg.	One dose to be administered every three hours till relief is noticed.
	Kasturi Bhairava	30 mg.	
	Shringa Bhasma	30 mg.	
	Kalaka Churna	240 mg.	
2.	Shuddha Tankan	260 mg.	Mix the powders with honey and juice of ginger; it is to be used as a linctus.
	Yavakshara	750 mg.	
	Kataphaladi Churna	4 gm.	

The course of the disease is extremely rapid; if proper medication is not given in time, there is little hope for the patient. Sometimes surgical help has to be sought. Normally the surgeons make a supplementary air passage to let the patient breathe and in the meantime medication is given.

Allopathy has developed a serum which, if injected in childhood, grants lifelong immunity against the disease. Normally it is a part of the triple antigen which is administered to infants.

SANDFLY FEVER

Causes and Symptoms: Sandfly fever Marumakshika Jwara, also known as a three-day fever (from its duration) is a short, sharp fever caused by the sandfly, small hairy midge (*phlebotomus papatasis*), which infests refuse heaps. It is common at the junction of the seasons and is endemic to the northern regions of India particularly Punjab, Delhi, Western U.P. and Madhya Pradesh.

Its cardinal symptoms are: headache, feverishness, a flushed face, general sensations which an influenza patient has, bloodshot eyes but no catarrh. The temperature goes upto 104° F. and returns to normal after three days; sometimes there may be a relapse. The pulse is weak and thready.

Treatment: Ayurveda treats it as one of the ordinary fevers without any complications and the following prescription is recommended:

Hinguleshwar	120 mg.	To be taken four
Godanti Bhasma	180 mg.	times in the day
Amritasatva	240 mg.	with honey

Regimen: As there are no digestive disorders attending this fever, the dietary restrictions are a little relaxed. Even so, soft and easily digestible foods are recommended. The patient must get proper rest and see that his bowels function normally. In case of costiveness, a suppository or a mild laxative is recommended.

YELLOW FEVER

Causes and Symptoms: Yellow fever—Peeta Jwara—is an acute disease of certain tropical regions of the world and is characterised by fever and jaundice. It is endemic to the West Indies, some parts of the Spanish Main and some parts of Africa. Till a vaccine was developed, it continued to harry the Western hemisphere, decimating populations where it spread as an epidemic. A particular mosquito is supposed to cause it and costal and swampy areas are particularly prone to the disease. India, fortunately, is outside the

prone areas and if at all the disease is noticed, it is an imported malady.

The cardinal symptoms of yellow fever are: severe headache, shivering of black bile and a temperature of upto 104° F. The fever recedes on the fourth day and comes back with renewed vigour on the sixth day. The tongue is furred and the bowels constipated. There are also signs of internal haemorrhage and failure of the kidneys. If it continues for more than four days, the liver is also involved; its inflammation leads to jaundice. If untreated or if medication fails to relieve the symptoms, the disease is fatal on the sixth or seventh day.

Treatment: Ayurveda recommends the same treatment as prescribed for leukemia. (see leukemia) The same precautions and regimen should be adopted as described in that section.

MUMPS

Symptoms: Mumps—Karnamulaka Jwara—is an infectious disease characterised by inflammation of the salivary and parotid glands, frequently occuring in an epidemic form in winter or spring, which affects mostly children. If it occurs at later life, it usually leads to other complications such as orchitis (swelling of the testicles) leading to atrophy of the testicles and later to sterility among the males.

The first signs are fatigue, slight feverishness, and sore throat which may precede the swelling. The parotid gland, situated in front of and below the ear is first affected. Face ache and temperatures upto 104° follows and inflammation spreads to glands below the jaw. After four or five days, both the swelling and the temperature subside. If the disease attacks adults

(fortunately it seldom does) there may be swelling of the testicles in males and the ovaries and the breasts among the females.

Treatment: The following Ayurvedic prescription is recommended:

1.	Mrigshringa Bhasma	120 mg.	To be taken with warm water or juice of ginger four times a day
	Sanjivani	120 mg.	

Alongwith the above, Ashwakanchuki (120 to 240 mg.) may be given at night with warm water.

The affected part may be covered with a poultice consisting of Nalukakepa or Danshangalepa and ghee. It must be covered with a cotton or woollen cloth to keep it warm.

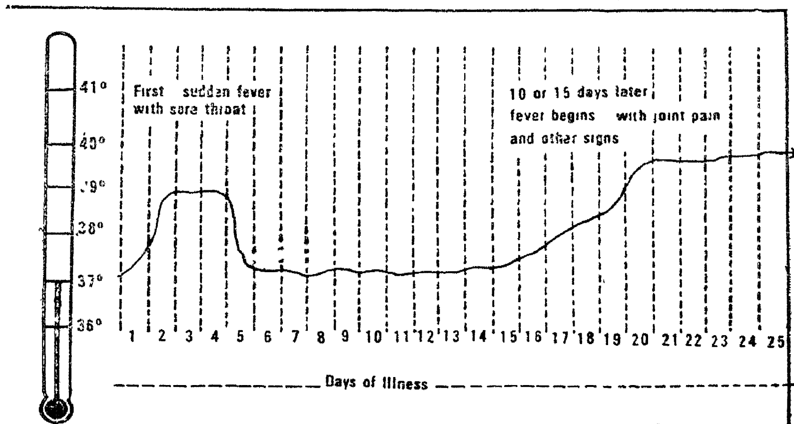
Diet: Soft, liquid foods are recommended. As a matter of fact, they are the only foods the patient can take since the inflammation of the glands under the jaw makes swallowing of any solid substances painful.

RHEUMATIC FEVER

Symptoms: Rheumatic fever—Aamavata Jwara—is a general disorder accompanied by much pain in the joints, feverishness and copious perspiration, with a tendency to spread in an erratic manner. It involves the smooth membranes of the body, particularly the heart.

An attack of rheumatic fever generally begins with chilliness followed by fever and a feeling of stiffness or pain in one or more joints, usually of the kness, ankle,

RHEUMATIC FEVER - TYPICAL FEVER PATTERN



wrist or shoulder. The pain becomes severe with the passage of time, leaving the patient helpless in bed. His face is flushed and the whole body bathed in perspiration. The temperature is usually 103° F., the pulse rapid but full, the tongue coated; thirst, loss of appetite and constipation are also present The attack lasts for a few days, if there is no relapse.

The disease is one to which children and adolescents are more prone; it is generally not evidenced among people of more than 30 years of age. The most dangerous period, if the disease attacks an individual, is upto the age of 18; with proper care and medication it can be controlled. But there is a likelihood of certain complications developing. Inflammation of the outer membrane, the inner membrane and the muscle of the heart may develop and the risk of cardiac complications is greater among patients of tender age. The joints being smaller among children, their swelling may sometimes be overlooked and it may be too late in some

cases. Another serious complication which is noticed in some cases is hyperpyrexia (high fever) ranging from 106° to 108° F.

Treatment: The allopaths treat cases of rheumatic fever with massive doses of penicillin continued over a long period, but one of the risks involved is either that the patient may be allergic to the drug or he may develop a sort of immunity to its later use. The following Ayurvedic preparations are recommended in a case of rheumatic fever:

1.	Hinguleshwar	120 mg.	To be administered
	Aamavatari Rasa	240 mg.	thrice daily with
	Saubhagya Vati	240 mg.	warm water
2.	Vishveshwara Rasa	120 mg.	To be given twice
	Shringa Bhasma	120 mg.	daily with honey
	Yavakshara	240 mg.	
	Hritpatri (digilatis)	240 mg.	

Diet: As a dietary supplement, Panchkol-shruta milk may be given thrice in quantities of upto 180 ml. If there is constipation, it should be treated with appropriate remedies. Hot compresses (sand or salt put in a bag and heated over a hot plate) should be applied to the swollen joints. Leaves of Amarbel or Dhatura heated over a hot plate may be applied to the affected joints as a poultice.

Complete rest, soft and warm foods, substances containing acrid components—like bitter gourd—are recommended. Laxatives and diuretics should be administered in appropriate cases.

HEAT EXHAUSTION AND HEAT STROKE

Symptoms: Heat exhaustion—Aanshughata Jwara—and heat stroke—Aanshughata Sannipata—are maladies endemic to tropical climates. In India the disorders strike people in summer when the temperature goes up; those living or moving about in the open without proper clothing or precautions are more susceptible than others. Profuse sweating due to atmospheric heat leads to severe loss of vital salts in the body and a condition known as heat exhaustion develops in which the patient feels faint and may even fall in a swoon. Another reason is dehydration which may lead to unconsciousness.

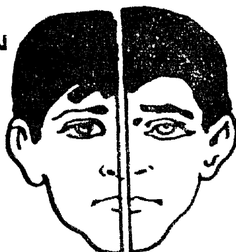
Heat exhaustion is a precursor to heat stroke which is characterised by high fever, absence of sweating, thirst, a rapid pulse, confusion and, sometimes, loss of consciousness.

The fever of heat stroke comes on suddenly; the temperature rises from 106° F. to 108° F. Anal temper-

DIFFERENCES BETWEEN
HEAT EXHAUSTION' AND 'HEAT STROKE'

HEAT EXHAUSTION

- Sweaty, pale, cool skin
- larpe pupils
- no fever
- weakness



HEAT STROKE

- dry, red hot skin
- high fever
- the person is very ill or unconscious

To avoid all these emergencies due to too much heat, always drink plenty of water with salt throughout the day in summer

ature sometimes touches 112° F. Severe ache in the body, particularly the head, confusion, cramps, a sense of impending doom and loss of consciousness follow. If immediate steps are not taken, the patient may die of dyspnoea (difficulty in breathing).

Treatment: In case the temperature is over 104° and appears to rise, immediate steps should be taken. The patient must be divested of all his clothes and his body wrapped in a sheet soaked in iced water. Alternatively he should be laid under a shower bath and the body should be cooled till the temperature returns to 102° F. When it starts falling and the pulse shows signs of weakness, Mritsanjivani Sura (50 to 75 ml.) should be given.

The following prescription is recommended:

Ratneshwar Rasa	120 mg.	To be taken thrice
Chandanadi Churna	240 ml.	in the day with Triphala water

Mahashishir Panak should be given to the patient in 10 ml. doses every half an hour.

The old adage 'prevention is better than cure' applies more to heat stroke than to any other malady. One should take care to take water at frequent intervals during summer. A little salt may be added to it before one goes outdoors in the summer sun. That would keep the balance of the vital salts in the body in proper shape. The head and the back of the neck must be covered with a thick cloth. Soup made of raw mangoes (plentifully available during summer) taken once in the day helps in preventing heat stroke. The body fluids must not be allowed to fall below a certain minimum which must happen when one sweats profusely and that is why more liquids should be taken, even if one does not feel thirsty.

SMALLPOX AND CHICKENPOX

Causes and Symptoms: Smallpox—Masurika—or variola, is an acute infectious disease characterised by fever and by the appearance on the surface of the body of an eruption which after passing through various stages, dries up leaving more or less distinct scars. Few diseases have been as destructive as small pox and its epidemics through history have decimated populations of many countries. It is extremely infectious and one case imported into a locality may cause an epidemic. In spite of the fact that a vaccine to prevent it had been invented many decades ago, it continued to plague our country mainly because of a superstition against the use of inoculation. It has now been almost completely eradicated thanks to the concerted efforts of the World Health Organisation and the medical departments of the various countries of the world. In Ayurveda it is called Masurika or Sheetala and is supposed to be caused by the vitiation of any of the three Doshas of the body. It is of many kinds, depending on the severity and persistence of the malady. The temperature generally does not exceed 104° F. but if the swelling accompanying the eruptions is too severe it may lead to internal haemorrhage and cause death.

Treatment: The first thing to be done when a case of smallpox is noticed is to segregate the patient so that the infection does not spread to others. His bed clothes and utensils used by him should be thoroughly cleaned as soon as they are soiled. A mild purgative, if the patient is strong, might be given to reduce the virulence of the disease but if the fever is high and the eruptions red and painful, no laxatives are recommended.

In the first week, the following medicines should be given:

Swarnamakshishka Bhasma	120 mg. in the morning and evening with decoction of Kachnar tree bark
Eladyarishta	20 ml. after meals with lukewarm water

In the second week, the following prescription is recommended:

Indukala Vatika	120 mg. in the morning and evening
Haridra Churna	One gm. with juice of leaves of bitter gourd plant twice—midday and night—daily.

We have dealt with smallpox rather perfunctorily in view of its rare occurrence these days, but another disorder which is rather common, particularly among the children, is proposed to be mentioned in detail. It is what is known as chicken pox or Laghu Masurika. Though many people suppose it to be a variety of small pox, it is much less severe and the mortality rate is negligible as compared to the havoc which smallpox caused when mankind had not found a way to prevent it through inoculation.

Chicken pox is an acute contagious disease of children, characterised by feverishness and an eruption on the skin. Children of ages 1 to 10 are more prone to it. Even though it has a superficial resemblance to smallpox it is entirely a separate disease.

The disease comes on with slight feverishness and pain in the back and the legs. There may also be a

feeling of chill and within 24 hours of the onset, small red pimples appear on the back and chest, and sometimes on the forehead also. The pimples turn into vesicles filled with a clear liquid but within a day or two they either suppurate or shrivel up with a brown crust appearing on them. The eruption may reappear for several days and that is the main point of difference between chickenpox and smallpox. In the latter disease, the vesicles appear at the same time all over the body.

The medication prescribed by Ayurveda for chicken pox is the same as in the case of smallpox. Even without medication, chickenpox will pass off without any ill effects in about a week. In only adults—whom it strikes infrequently—it may prove to be a problem leaving the patient extremely weak and in a condition of prostration. There are not many dietary restrictions as the disease does not affect the digestive system. A patient may be kept on normal diet depending upon his appetite which is affected in some cases of fever. Purgatives should be avoided as also hard-to-digest foods.

MEASLES

Symptoms: Measles, or Romanika in Ayurveda, also known as Morbilli or Rubeola, is an acute infectious disease which strikes mostly children. The more tender the age, the better is the patient able to bear the troubles that measles bring. An old adage says that the earlier one has measles or love in his life, the better he is able to weather the storm attendant upon the two afflictions. An attack of the disease generally leaves the sufferer immune from second attacks. But that is the general rule to which many exceptions have

been noticed. The second attack generally comes, if the first had been of a very mild form. Like chicken pox and smallpox it is contagious and the sufferer should be segregated at the first signs of trouble.

In the beginning there is acute catarrh of the mucous membrane, sneezing follows with a watery discharge and sometimes bleeding from the nose. There is a dry cough and hoarseness of voice. The temperature of the body goes upto 104° F. and the pulse is rapid with headache, thirst and restlessness. The temperature recedes on the third day and on the fourth the characteristic rash of measles appears. The rash is first noticed on the brow, cheeks, chin, behind the ears and also on the neck. It consists of small spots of a dusky red or crimson colour, slightly elevated above the surface of the skin. The face acquires a swollen and bloated appearance. Sometimes the rash is noticed in the mouth and the throat. The rash continues for two or three days and then starts to fade. Slight peeling of the skin may take place during convalescence. The fever along with the distressing symptoms described above start fading the moment the rash appears and the appearance of the eruption should be taken as a sign of the start of the recovery from the affliction.

In certain rare cases, the measles may occur in very severe or malignant form giving rise to complications. If the bronchial tubes or the lungs are involved the result may be fatal. Almost all fatal cases are the result of involvement of the lungs or the bronchia.

Treatment: Ayurveda believes that measles is the result of vitiation of both Kapha and Pitta. The first thing to be done when the malady is suspected to be measles is to clothe the patient in warm garments. Hot water and other liquids should be given to

encourage the rash to appear. One of the grand-mother's nostrums is to give the child raisins to eat. Powdered liquorice root may be given with advantage with honey. A powder of equal parts of tamarind seeds and turmeric may be given in 5 to 6 grain doses thrice daily.

Before the rash appears the following Ayurvedic preparation should be administered:

Swarnamakshik Bhasma	120 mg.	To be given four
Kasturi Bhairava	120 mg.	times in the day
Shringa Bhasma	120 mg.	with juice of bitter
Shaubhagya Vati	240 mg.	gourd (Karela)
		and honey

After the rash appears on the body, the medicines prescribed for smallpox should be given.

Unless accompanied by morbid complications referred to above, measles would cure automatically. But the most important precaution to be taken is not to suppress the fever of measles as that is likely to lead to a more virulent attack of the malady.

Regimen: Dietary regimen recommended in cases of fever should be followed. The patient may be given normal diet depending upon his appetite but hard to digest foods, fatty substances and those which are likely to lead to constipation should be avoided. The patient should not be exposed to draught and should be advised to lie down in a soft bed in a slightly dark-ened room.

BULBOUS ERUPTIONS

Symptoms: There is another category of fever: Visphotaka Jwara the one which accompanies eruptions,

particularly bulbous eruptions. They may be confused with eruptions of smallpox even though the two are of different varities. The author of the *Bhaishajaratnavali* has tended to treat them (bulbous eruptions) as a sign of small pox but Sushruta has wisely differentiated between the two. Sushruta has treated these eruptions as minor diseases and has traced their origin to the vitiation of the Pitta and the blood. He has categorised these eruptions into seven classes: (1) three are caused by vitiation of any of the three Doshas of the body; (2) three are caused by the interaction of the Doshas; and (3) one is caused by the vitiation of all the three Doshas together.

Treatment: Ayurveda recommends drugs which alleviate Pitta and help to purify the blood. The following prescription is recommended when there is fever alongwith a bulbous eruption on the body or any of its parts:

Chandanadi Loha	240 mg.	To be given
Shuddha Gandhaka	120 mg.	thrice daily
Pravala Pishti	120 mg.	with candy (mishri)

Regimen: The rest of the regimen and medication to be adopted in case of fever attended by eruption is the same as has been indicated under the section on small pox.

ERYSIPELAS

Symptoms: Also called the Rose and St. Anthony's fire, Erysipelas—Visarpa—is a disease characterised by diffuse inflammation of the skin, or of the subcutaneous cellular tissue, attended with fever. When the disease is in a mild form there is simply redness of the skin

which feels hard and thickened on which small vesicles appear. The redness tends to spread to the neighbouring areas of the skin and the whole body may be involved in the inflammatory process. If the subcutaneous tissue is involved, pus may form under the skin.

Erysipelas of the face begins with symptoms of general illness, the patient feeling languid, drowsy and sick, while there is frequently shivering and later fever. The temperature may rise to 104° or 105° F. and inflammation may appear on the face beginning with the tips of the nose. If the inflammation is not controlled in time and spreads to the throat the glottis may become involved leading to fatal results. If the trouble attacks the membranes of the brain, the result is almost always fatal.

Causes: Ayurveda believes it to be the result of vitiation of all the three Doshas and it is categorised according to the Dosha involved. It is of seven types, but Sushruta has mentioned five varities—three born of the vitiation of any of the three Doshas, one born of more than one Dosha and another traumatic (or caused by injury).

The various varities of erysipelas and its symptoms differ according to the Dosha involved, but most of the symptoms common to all the varieties are: inflammation of the skin, the cellular tissues underneath the epidermis, fever and other symptoms present in a fever.

Treatment: The standard Ayurvedic medication for erysipelas is the following:

Kalagnirudra Rasa	120 mg.	To be given thirce
Pippli Churna	120 mg.	with honey

Nimbadi Quath should be administered in a dose

of 58 ml. once in the morning. The inflamed skin should be treated with Dashangalepa to which cow's ghee should be added. It should be spread over gently on the affected skin.

The patient may be bled for quick results, but that should be under the supervision of an expert in the techniques of bleeding Any excessive loss of blood could pose a danger to the life of the patient.

Diet: The dietary regimen is the same as in the case of other fevers. The patient must avoid a cold bath and also exposure to cold wind as that is likely to aggravate the condition.

HECTIC FEVER

Symptoms: Hectic, or hectic fever—Pralepaka Jwara—is a fever which may occur in certain severe forms of tuberculosis or septic poisoning. It is mild in intensity and comes in the evening. The temperature ranges between 102° and 104° F. and falls to normal in the night, sometimes below normal. There is also profuse sweating acompanied by extreme weakness and even prostration.

Treatment: If the fever is a symptom of tuberculosis, the following prescription should be tried:

Swarna Vasantamalati	120 mg.	To be given
Pravala Bhasma	120 mg.	with honey
Yakshamari Lauha	240 mg.	thrice daily
Sitopaladi	1 gm.	

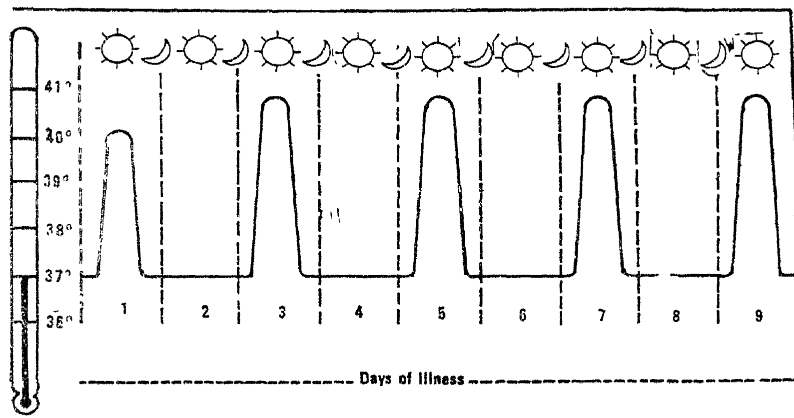
If attendant upon Septicaemia, the fever can be controlled by the administration of the following prescription:

Shri Jaimangala Rasa	60 mg.	To be given
Sanjivani	120 mg.	thrice daily
Shringa Bhasma	120 mg.	with honey

INTERMITTENT FEVERS : MALARIA

Intermittent—Vishama is a generic term for fevers like malaria which have a tendency to return after they have left the patient. They continue for some time, subside completely, and then return again. The main variety of intermittent fever is malaria.

Symptoms and Causes: Malaria (from the Italian *mala aria* —bad air) is also known as ague, paludism, jungle fever, marsh fever, and periodic fever. It is caused by the presence of certain parasites in the blood. In the beginning, it may come on every day, every second or third day and if untreated it may assure a



chronic from called malarial cachexia with a tendency to frequent relapses.

The disease has been known from ancient times but it was only in 1898 that it was conclusively proved to be the handiwork of the mosquitos of the Anopheles variety. The disease is found all round the world, but is endemic to tropical climates where there are marshes or pools of stagnant water, rank vegetation and a poorly fed population.

Types of Malaria: Malaria is generally of three types, depending upon the parasites which cause it: the tertian fever, the quartan fever and the malignant tertian malaria.

An interesting fact which may be mentioned here is that it is the female of the species that bites the prospective malarial patient. The male mosquito does not carry the parasites which cause the disease. The parasites transmitted by the female mosquito enter the blood stream and reach the liver where the mature and multiply. From there they are released into the blood stream.

For a day or two before the actual fever sets in, there may be headache, vague pains about the body and the limbs, chilliness and slight rises of temperature. An acute malarial attack has three stages: the cold stage, the hot stage and the sweating stage. The cold stage begin with a feeling of chill even in the hottest weather. The stricken person takes to bed and heaps all the quilts and blankets that he can find. In spite of the chill he feels, his temperature is rising. The hot stage comes on as the temperature of the body rises, beginning with hot flushes, which lengthen till the body feels burning hot, the fever rising to 105° or 106° F. There is also headache, dizziness, pain throughout the body and even delirium. This stage may last for hours. After

the fever has reached its highest point, the third stage begins. It starts with profuse sweating and a gradual lowering of the body temperature as the sweat cools it. As the temperature is lowered, the feeling of dizziness, headaches and pain in the body recedes and the patient feels cured even if weak.

If malaria is in fact a quartan fever, there is an intermission of two days before the next attack, that is to say, if the first attack be on the first day of the month, the succeeding attacks would be on the 4th, 7th and 10th day. In tertian fever, the attacks are on alternate days. But in aestivo-autumnal fever each attack may last considerably more than one day and the next may come immediately after. The patient is then in a state of fever known as subtertian fever. If the infection is severe, the malarial fever may occur every day.

As a rule, people after passing through an ague, feel completely recovered till the next attack is due, but now and then the attack may develop seriously. For example, hyperpyrexia (very high fever) may develop and the temperature may continue to rise till death intervenes. The second stage described above—the hot stage—may continue without giving way to the third or the sweating stage and the patient may lose consciousness. If the malarial parasites block the small blood vessels of the brain, what is known as cerebral malaria may develop which is a very serious, and in most cases, fatal, complication.

Like tuberculosis, the preventive aspect of malaria is as important as the curative one. Protection from mosquitoes is of the essence. Stagnant pools of water should be eliminated or sprayed with an oil the film of which precludes the multiplication of the malarial parasites. Spraying of chemical substances is, of course, important, but recent experience has shown that the

parasite has developed immunity to insecticides used to kill it. Keeping the body covered all the hours of the day or night against mosquito bites is, therefore, more important.

Whatever the causing organism, the susceptibility to disease is also another factor. If that were not so, all persons exposed to mosquitoes of the malarial variety must suffer from malaria. According to Ayurveda, this susceptibility increases or decreases according to the vitiation of the three Doshas of the body. Acharyas have categorised malaria according to the predominant Dosha whose vitiation leads to an attack of malaria.

Treatment: If a mild laxative is administered to the patient before an attack of malaria comes on, its virulence is modified. Solid foods should be substituted by a liquid diet. Cool water should be drunk in adequate quatities and if the temperature stays above 104° F. cold compresses should be applied to the forehead. In case of very high temperatures (about 107° F. or above) the patient should be wrapped in a sheet dipped in ice-cold water. The sheet should be removed after the coolness has been absorbed and again dipped in water and the patient wrapped in it. The treatment should be discontinued after the fever has come down to 102°.

If the juice of the holy basil (Tulsi)—180 grains is mixed with 45 grains of powder of black pepper and given to the patient in the cold stage of the fever, it will reduce the virulence of the hot stage when it comes. Remember that the holy basil is a prophylactic against malaria and has been used in India for centuries now. Some Ayurvedic practitioners recommend the infusion of some leaves of Tulsi and a couple of black peppers with one's tea, it can help stave off malaria. Even if it comes its severity would be reduced in a person who

has been taking this infusion. The following standard Ayurvedic preparations are recommended in cases of malaria:

Sheetmani Rasa	240 mg.	To be taken thrice daily with honey
Mahajwarankusha Rasa	120 mg.	To be taken thrice
Shuddha Sphatika (Alum)	240 mg.	daily with juice of leaves of Tulsi

The above preparations are for the first attacks of malaria; when the attacks are intermittent, the following prescriptions would be more useful:

Tuvrimallayoga	60 mg.	To be administered twice daily; the first dose should be given one hour before the attack and the other one hour after.
Godanti Bhasma	120 mg.	The medicines
Shuddha Sphatika	120 mg.	should be made
Flesh of Karanja	120 mg.	into six pills and should be given at two hourly intervals before the attack.

In the case of remittent fever—i.e, one which continues without let-up, the following medicines are recommended:

Jwarankusha	120 mg.	To be taken
Tala Bhasma	240 mg.	thrice with juice
Karanja Churna	500 mg.	of Tulsi leaves.

Vishmushtyadi Vati or Karanjadi Vati	240 mg.	To be taken thrice with juice of Tulsi leaves
Talam Bhasma	240 mg.	
Sudarshana Churna	2 gm	To be taken twice daily with warm water
Sphatika	240 mg.	
Sarjika (soda-bi-carb)	500 mg	

BLACK WATER FEVER

Symptoms: Blackwater fever—Kalamcha Jwara—is an acute disease characterised by haemoglobinuria (black water)—presence of blood pigment in the urine. The infection of blackwater fever destroys the red blood corpuscles in the blood vessels or in the urinary passage leading to a dark red colour of the urine. It is generally associated with malignant tertian malaria and occurs in tropical countries. Central Africa, India and the Far East are its favourite haunts.

The cardinal symptoms of black water fever are: temperature of the body ranging from 104° to 105°F, rigor (shivering), nausea, bilious vomiting, gastric discomfort, jaundice and the passage of blackish or brownish urine due to the presence of the blood pigment in the urine. Both the spleen and the liver are enlarged and tender to the touch. The temperature of black water fever falls after a few hours preceded by profuse sweating and the skin becomes jaundiced. Mild cases may recover in a couple of days but if a failure of diagnosis or carelessness to the malady occurs, the fever may last many days. There may be a succession of attacks emaciating the patient.

The disease is found mostly in cases where administration of quinine has been present over a long period. The malaria for which quinine is given enters the terti-

ary stage and degenerates into black water fever.

Treatment: The patient should be kept warm. A mild laxative or a soap water enema may be given to deal with costiveness which is generally present. A drip (containing rock salt 6 grammes, soda-bi-carb 12 grammes, glucose 58 grammes, adrelinine 5 minims) would be effective. Water from a fresh coconut should be taken by the patient instead of water.

The fever, according to Ayurveda, is the result of vitiation of both Vata and Kapha. The following drugs are recommended at the time the fever is at its height:

1.	Raktapittakulakandana Rasa	120 mg.	Should be given four times daily with decoction of bark or neem tree
	Chandanadi Lauha	240 mg.	
	Karanjadi Vati	500 mg.	
	Laksha Churna	500 mg.	
2.	Meghnada Rasa	120 mg.	Should be taken four times a day
	Swarnamakshika Bhasma	120 mg.	
	Talbhasma	120 mg.	
	Swarnagairika	240 mg.	

After the attack has passed, treatment indicated for jaundice should be given with all the attendant regimens regarding food and rest.

Readers should be cautioned not to confuse the black water fever with Kala Azar which is a totally different fever and probably more serious than the one we have discussed above.

KALA AZAR

Causes and Symptoms: Kala Azar—Kala Jwara—

(black disease in Assamese) is also known as visceral leishmaniasis, Dum Dum Fever, and Black fever. It is a chronic disease which occurs along the shores of the Mediterranean, North Africa, Sudan, Assam in India, China and the tropical zone of South America. Allopaths believe that it is caused by an organism transmitted by the bite of a sandfly, usually the *phlebotomus argentipes*.

The onset of Kala Azar is actue or insidious according to the virulence of the infection. There is irregular fever, progressive anaemia in which the white blood cells are found to be diminished and marked enlargement of the spleen. The spleen of a kala azar patient is sometimes found to weigh 4.5 kilogrammes.

The onset of fever in kala azar, as has been mentioned above, is insidious. The fever increases gradually. But in about 25% of the cases, the attack is sudden, the temperature reaching 104° F. within a couple of hours. The fever attacks twice or three times in 24 hours. And that is what distinguishes it from other intermittent fevers. It is irregular and may leave the patient after three to six weeks. But it recurs and leads to enlargement of the liver and the spleen, the former less than the latter. Many of the patients suffer from blue or black spots on their forehead, face, palms or soles of the feet. A continuous distension of the stomach is also noticed. There is emaciation if the attacks continue and there is a constant pain in the bones of the arms and the legs. The appetite of the patient is generally not affected and that probably explains the long course of the disease.

Treatment: Antimony and its preparations have long been used for the treatment of kala azar. The following Ayurvedic prescriptions are advised in cases

of kala azar:

1.	Shuddha Nilanjan (antimony)	60 mg.	To be given four times in the day with honey
	Mukta Bhasma	60 mg.	
	Praval Bhasma	120 mg.	
	Shuddha Swarnagairika	120 mg.	
	Shankha Bhasma	120 mg.	
2.	Tamra Bhasma	60 mg.	To be given twice (midday and night) with honey
	Yakritaplihodaradilauha	60 mg.	

FILARIA

Causes and Symptoms: Filaria, Shlipada Jwara, according to allopathy, is caused by an organism filarie. It is a thread like worm and has many varities, e.g., Wuchereria Bancrofti (Filaria Bancrofti), Loa Loa or filaria loa, Onchocerca Volvulus, and Dranunclus Medinensis. The last named organism is more commonly found in India. The female of the species attains a length of four feet. It is transmitted to humans through contaminated drinking water. Once it has attacked, the person may not feel anything for almost a year, after which there is a painful swelling in the legs. The skin of the affected parts may become like that of an elephant, hence the name elephantiasis. In some cases the infection is carried by the mosquitoes.

There is inflammation of the skin and the subcutaneous tissue and concurrent obstruction of the lymphatic vessels. The thickening is due to excessive increase in the connective tissues. The inflammation also attacks the muscles of the legs and they become

weak.

In some cases there is also involvement of the testicles which become inflamed and enlarged. Gross enlargement of the legs may proceed to such an extent that their circumference increases to several feet and the scrotum may attain a weight of almost 25 kilogrammes. Elephantiasis may develop elsewhere in the body, e.g., the arms, but not very commonly.

The disease is commonly found in the Terai areas of the Himalayas, eastern Uttar Pradesh, Bihar, Bengal, Cochin and Travancore—all areas where natural drainage is defective and water has a tendency to collect in pools and ponds where filaria carrying mosquitoes are found in abundance.

The fever of filaria is a short, sharp fever. It rarely continues for more than four days, but its attacks are frequent and the symptoms described above start showing. The inflammation tends to increase with each fresh attack till the legs of the patient resemble those of an elephant, his testicles enlarge to enormous proportions and he has difficulty in walking, both on account of the circumference of the legs and the weakness of the muscles which results from the inflammation.

According to Ayurveda, the disease is caused by the vitiation of all the three Doshas, but mainly Kapha. Blood letting is advised by the acharyas in certain cases of elephantiasis But it has to be done under the guidance of an expert.

Treatment: For the fever which accompanies filariasis or elephantiasis, the following medicines are recommended:

Sanjivani 120 mg. To be taken thrice

Shringa Bhasma	120 mg.	daily with warm
Hinguleshwar	120 mg.	water

After the fever has subsided the following prescription should be tried for a permanent cure of the malady:

Nityananda Rasa	250 mg.	To be taken twice
Pippli Churna	500 mg.	(morning and mid-day) with decoction of bark of Shakhotaka tree
Shripadagajakeshari	120 mg.	should be given in one dose at night

A paste made of Dhatura, root of castor tree, Nirgundi, Punarnava, bark of Sahijan or mustard seeds—all in equal quantities—ground in urine of cow or water should be applied to the affected parts.

6

DISEASES OF THE GENITO-URINARY SYSTEM

शकृस्तु प्रतीष्याता-द्वायुर्विगुणतां गतः ।
आह्मानं वातशूलभ च मूत्रसंगम्म करोति च ।।
योगरत्नाकर 2 : 855

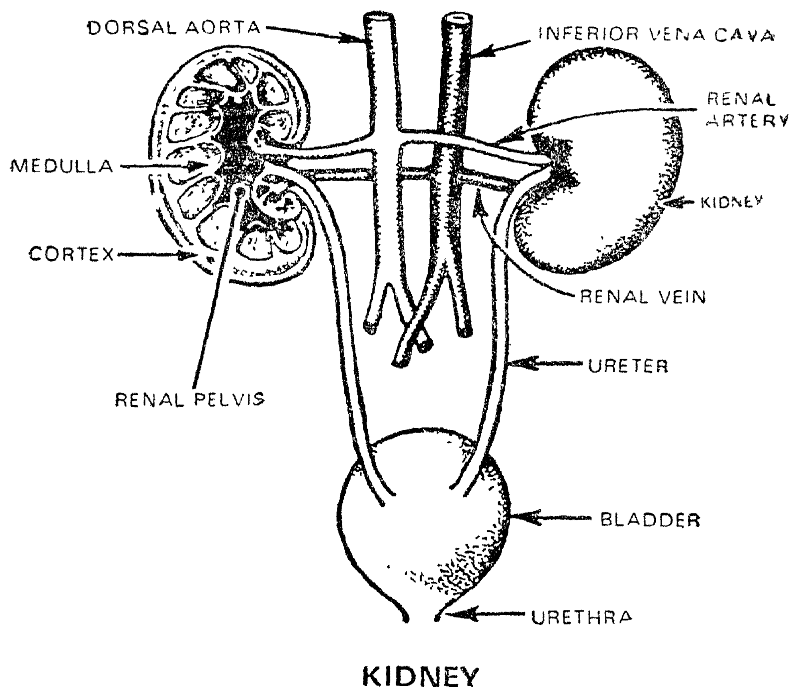
Interruption of excretion of waste products leads to vitiation of vayu, pain and dysurea.

In this chapter we shall discuss the diseases of the genito-urinary system, namely, the diseases of the kidneys and the reproductive organs.

Diseases of the Kidneys

Kidneys are a pair of glands situated close to the spine in the upper part of the abdomen. They are grouped under the most important parts of the body any malfunctioning of which can lead to serious disorders and sometimes death. Renal failure (the incapacity of the kidneys to perform their function) is one of the most serious ailments to which humans are susceptible.

The chief function of the kidneys is to filter the blood and to remove its impurities which are ejected through the urine. The blood passes through the glomerulus (small capillaries with capsules) and they filter the non-protein portion of the plasma. The efficiency of and the burden on the kidneys can be judged from the fact that in humans they filter between 150 to 200 litres of plasma in 24 hours. The usable



KIDNEY

portion of the blood is returned to the heart through the renal vein. The waste matter is ejected through the bladder. Substances like amino-acids, glucose, sodium, potassium, calcium, magnesium and chlorine are re-absorbed to the system and urea, uric acid and phosphates are ejected.

When the kidneys are diseased, their functioning is impaired and impurities which should have been ejected, continue to remain in the system, poisoning it. The general term used to describe the accumulation of poisons is uraemia. The following are the symptoms common to the various types of kidney diseases:

(1) **Pain**: Inflammation of the kidney, formation of calculi (stones) in the gall-bladder or the urinary tract etc. produce pain in the renal region. The pain of inflammation is situated high up in the loins, but the pain (generally referred to as renal colic) in the back is usually a symptom of formation of stones in the kidney, gall bladder or the bladder. It is of a very agonising nature. and leaves the sufferer prostrate even after it has passed.

(2) **Urine**: The urine almost invariably shows the changes in kidney diseases. It is diminished in acute conditions and may even contain blood. If there are traces of pus ın the urine, it might indicate suppuratıon of the diseased kidneys. In the case of stones, urine examination would show the presence of deposits of the substances of which the stones are made. In Bright's disease, there is excess of albumin found in the urine.

(3) **Dropsy**: Another cardinal symptom of kidney malfunctioning is the presence of dropsy (abnormal collection of fluid under the skin) particularly under the eyes.

(4) **Change in Circulation of Blood**: Changes in circulation of blood take place in chronic kidney diseases like pylonephritıs which leave an abnormal amount of uric acid in the blood giving rise to high blood pressure. There is also thickening of the arteries as in Bright's disease leading to pain in the chest, loss of mental power, bloodlessness, impairment of vision and even apoplexy.

(5) **Uraemia**: Uraemia is a condition in which there is a general poisoning of the system due to the failure of the kidneys to expel the waste matter.

DYSUREA

Symptoms and Causes: Dysurea, or Mutrakrichha in Ayurveda, is a condition in which the amount of urine passed is reduced, it is expelled painfully and in small amounts every time. A patient suffering from dysurea may always feel the urge to urinate, but may not be able to get satisfaction from the act of urination. The feeling of relief which comes to a healthy person is missing in a patient suffering from dysurea.

The three main causes of dysurea are, according to allopathy: (1) cystitis (inflammation of the bladder); (2) inflammation of the urethra; (3) venereal diseases like gonorrhoea; and (4) enlarged prostrate gland. Hyperacidity is also one of the causes of dysurea because the excessive amount of acid present in the urine seems to produce the feeling of pain in the process of its ejection from the system.

Ayurveda recognises eight types of dysurea· three caused by the vitiation of the Doshas of the body, one by the vitiation of all the three Doshas, one by the failure of the system of ejecting the waste matter, and others by the presence of stones in the bladder.

The cardinal symptoms of dysurea as described above are: (i) scanty discharge; (ii) pain in the process of urination; (iii) pain in the penis (and in women in the ovaries); (iv) blood-mixed urine; (v) feeling of heaviness in the renal region and also the scrotum; and (vi) the ever-present urge to pass urine.

If dysurea is caused by the presence of stones in the kidney or the bladder, it is of Vata origin, because the vitiation of Vayu leads to the accumulation of chemical substances around nuclei which take the shape of stones.

Treatment: Pashanabheda (*bergenia ligulata*) is the drug of choice for the treatment of stones in the kidney or the bladder, because unless that condition is treated, dysurea caused by it cannot be relieved. Powder of the root of this drug (one teaspoonful) is given thrice daily. A decoction of the drug may also be given in one ounce doses thrice daily.

Decoction of the bark of Varuna (*cretiva religiosa*) tree is also useful in dealing with this condition. In case urine is obstructed by a stone in the urinary tract, Gokshuradi Guggulu is the drug of choice. But the most important drug used for this condition is Shilajita followed by the compound preparations Chandraprabha Vati. Other prescriptions for painful or scanty urine are:

1.	Eladi Churna Shweta Parpati Yavakshara	1 gm. 1 gm. ½ gm.	To be given four times in the day with decoction of Pashanabhedadi
2.	Mutrakrishhakantaka Rasa Shweta Parpati	240 mg. 2 gm.	To be given with Amritadi Quath six times a day

The patient suffering from dysurea because of kidney or bladder stones should be advised to desist from eating beans and pulses. White variety of pumpkin and gourds are useful for the condition. Green vegetables like spinach, tomatoes, and lady-finger should be avoided. He should be asked to give up sedentary ways and to take walks. Constipation should

be avoided through a proper diet, but if it comes mild laxatives should be used. The intake of liquids, particularly water, should be increased.

If dysurea is due to vitiation of Pitta or Kapha, the following drugs should be administered:

1.	Trinetra Rasa	240 mg.	To be given
	Chandrakala Rasa	240 mg.	thrice with
	Sheetala Parpati	2 gm.	Trinapanchamula Quath
2.	Khasoraka Yoga	240 mg.	To be given
	Varunadya Lauha	500 mg.	thrice daily
	Powder of cardamom seeds	500 mg.	with honey
3.	Mutrakrichhantaka Rasa	240 mg.	To be given thrice with
	Varitara Lauha Bhasma	120 mg.	honey
4.	Shilajita	500 mg.	To be given
	Powder of cardamom seeds	500 mg.	thrice daily with honey

In case there is discharge of blood with the urine the following prescription is the best:

Rasa Sindura	120 mg.	To be given
Honey or Trikantakadya Ghrita	10 gm.	thrice daily

In addition, fomentation of the renal region with a hot water bottle is indicated in most cases of dysurea. The affected area may also be coated with the following substances: (1) droppings of mice mascerated with water; (2) ear wax of a buffaloe; (3) equal quantities of saltpeter and pulp of root of banana tree.

In case of obstruction of urine caused by gonorrhoea, the physician should first treat that malady before any relief from painful urination can be expected.

Ayurveda has given the common name Mutrakrichha (scanty or painful urination, or to use the allopathic term, dysuria) to diseases of the kidneys whose cardinal symptom is difficulty or pain in the act of urination. Most of the diseases of the kidneys (known variously as Bright's disease, nephritis, albumanaria, formation of stones in the kidneys or the urinary tract) in which the chief symptom is dysuria can be cured through the use of medicines described above. Only in the case of venereal diseases like gonorrhoea—which also exhibit the symptoms of dysuria— is the treatment different. Even in that case the dysuria can be cured by the administration of the drugs prescribed above.

HAEMATURIA

Symptoms: Haematuria, or Adhoga Raktapitta to use its Ayurvedic name, is a condition in which there is blood in the urine. The blood may come from any part of the urinary tract, including the bladder. Haematuria is sometimes found in cystitis (inflammation of the bladder). Inflammation of the kidneys found in Bright's disease may also, in some cases, lead to haematuria. The presence of blood in the urine gives it a brownish or smokey colour. Another condition leading to haematuria is the presence of stones in the urinary tract. Sometimes when the stone moves with the flow of the discharge, it tends to scratch the urethra which produces blood. The difference merely is that in case of the scratching of the urethra the blood will be of bright colour; if the blood is of the bladder or the kidneys, the urine would have a brownish hue.

In Ayurveda, haematuria is a variety of Adhoga Raktapitta (downward vitiation of the Pitta in blood). In severe cases of this malady, the patient may be

found to be passing blood in place of urine.

Treatment: Goksura (*tribulus rerrestris*) is the drug of choice for this condition. Powder of the seed of the drug is administered in one teaspoonful doses twice in the day. It should be taken with honey for better results. Another drug which is highly effective in this malady is Silajatu. It should be given in one teaspoonful doses with milk twice a day.

Diet: The diet prescribed for patients of haematuria is vegetables prepared from banana (green), bitter gourd (karela) and drumsticks. Hot and spicy foods are to be avoided; meat soups may be given in moderate quantities. Juice of white pumpkin mixed with sugarcane juice helps faster recovery. Pomegranate and amla are useful in any form. The patient should be advised to desist from sexual intercourse during the course of the treatment. The intake of liquids, particularly water, should be increased. Alcohol and other drinks should be avoided.

ENLARGEMENT OF THE PROSTATE GLAND

Symptoms: Dysuria may be caused by the enlargement of the prostate gland too, in which case it is known as Mutraghata in Ayurveda. In this condition, the urine cannot be properly voided through the urethra.

The prostrate gland lies at the neck of the bladder in men and surrounds that part of the urethra lying within the pelvis. The gland is of importance especially because in late life it is apt to increase in size and change in shape in such a way as to obstruct the exit of urine from the bladder. There is great difficulty in

passing urine and the patient strains himself without voiding the urine. Or, it may come in drops, leaving the sufferer always with the desire of voiding his bladder. Modern medicine takes recourse to surgery to ameliorate the condition. In most cases the gland is removed since it is one of the common sites of cancer in the males.

Obstruction of urine caused in this condition may be of many types depending on the Dosha which has been vitiated. There may be spasmodic stricture of the urethra, distension of the bladder or inflammation of the bladder or the urethra—conditions generally accompanying enlargement of the prostate.

In most cases of Mutraghata the medicines indicated for dysuria are to be given. The doses may be increased according to the severity of the condition. Droppings of goat, earth mixed with goat urine and salt peter in equal quantities should be mixed and used as a poultice on the bladder to induce greater flow of urine. A piece of thick woollen cloth, such as a blanket, may be dipped in cow's urine and the bladder should be fomented with it. A quick remedy is to give 50 ml. of juice of pumpkin, one gramme of Yavakshara and 12 gm. of brown sugar to drink. Powder of cucumber seeds (20 gm.), salt (one gm.) may be mixed and taken with 200 ml. of Kanji (a wine made of black carrots) to induce the flow of urine.

Treatment· The following two prescriptions are particularly useful in dealing with enlargement of the prostate gland

1.	Chandraprabha	500 mg.	To be taken thrice
	Shweta Parpati	1 gm.	daily with decoct-
	Yavakshara	500 gm.	ion of gokharu

2. Varunadi Lauha	240 mg.	To be administered
Gokshuradya-valeha	120 mg.	at 12 hourly intervals (at 9 A.M. and 9 P.M.) with cow's milk

Dysuria of syphilis and gonorrhoea is discussed under those diseases.

SYPHILIS

Causes and Symptoms: One of the most horrible venereal diseases, syphilis, is a contagious disease of slow development. It begins as a sore at the site of the infection and in its tertiary stage shows changes resembling those caused by leprosy and tuberculosis. In most cases, it is acquired through sexual intercourse with a person suffering from it. The name syphilis is derived from a Latin poem by Fracastorious which had a character of this name. It spread as an epidemic among the French soldiers who were occupied in a siege of the city of Naples in 1494. That was why it was known in the beginning as Neapolitan diseases, the French Pox or the Great Pox.

In Ayurveda, the first mention of syphilis—called Firanga—is found in *Bhavamishra* in the 16th century. It is a disease imported from abroad, slightly different in characteristics from Updansha and sometimes called Firanga Updansha.

The two main types of syphilis are acquired and inherited. The acquired form of syphilis is caused by sexual intercourse with a person suffering from it and sometimes, by contact with the sores or even the use of articles used by the patient such as utensils, clothes and even combs. The acquired form of the disease is commonly divided into three stages: (i) primary; (ii)

secondary; and (iii) tertiary. Sometimes these stages merge into one another and the disease proceeds as one long sequence of the various symptoms which appear as its severity increases. Sometimes, the infection is so severe that ulcers appear all over the body. In other cases, it may appear only as a slight skin eruption but the effect on the constitution of the patient is no less harmful. The primary ulcers of syphilis are more like inflamed sores. At that stage it is not very difficult to cure them if a proper diagnosis has been made. But the swelling subsides after some time and the inflammed lymphatic glands also show improvement. After a couple of months, however, the secondary symptoms start appearing in the form of a low fever, loss of appetite, vague pains throughout the body and a faint red rash seen best upon the front of the chest. There may also be falling of hair, bloodlessness and sores in the mouth and the throat, headache, mental deterioration and painful swelling on the bones of the body. There is also a general enlargement of the lymphatic glands.

The third or the tertiary stage develops after the lapse of a few months or even years, if the disease has remained untreated or inadequately treated. There is a growth of masses of granulated tissue all over the body. The patches of this growth known as 'gummata' may appear as hard nodules in the skin, or form tumour like masses in the muscles, or cause great thickening of the bones, or they may develop in the brain or the spinal cord where their presence may show serious symptoms.

Still later effects are apt to follow such as disease of the arteries, leading to aneurysm (dilation of the artery due to the yielding of the vessel wall and gradual stretching by the pressure of the blood), apoplexy, early

mental failure, locomator ataxia (disordered movement of the limbs in walking) and paralysis.

The inherited form of syphilis or congenital syphilis may affect the child before its birth, leading as a rule to a miscarriage or a dead birth. If the child is born alive, it may start showing secondary symptoms after a few weeks. It may be deformed or become deaf. If the symptoms are suppressed for a few years, the child may develop a sunken nose broad at the bridge and may suffer from inflammation of the cornea or the iris

The eruptions of syphilis may appear as painful boils in the prepuce of the males or labia majora of the vagina among the females. The eruptions turn into hard nodules called chancre and then subside giving rise to other symptoms described above.

Treatment: The following are the drugs of choice in the treatment of syphilis:

1. Savirvari	200 mg.	Should be given morning and evening with sweetened milk.
2. Sarivadyavaleha	12 gm.	Should be given at breakfast time with milk
3. Sarivadyasava	20 mg.	Should be given with water after meals twice in the day.

In addition, Rasachandradi Yoga, 500 mg. capsules, should be given thrice daily. Hingulamrita Yoga (16 ml.) is another drug of choice.

A patient suffering from syphilis should be advised to take a salt free diet as it helps recovery. Bitter, sour

and pungent substances should be avoided. Intercourse is strictly forbidden.

CHANCRE

Causes and Symptoms: Chancre is the primary lesion of syphilis according to allopathy, but in Ayurveda it is treated separately. It is a contagious disease contacted through sexual intercourse with an infected person. It may also be caused by wounds on the male organ by nails, teeth or through intercourse with a woman during her monthly periods or with a woman suffering from some vaginal infection. Charaka has described it as Dhwajabhanga. It is of five types: three varities are born out of the vitiation of the three Doshas of the body, one by the vitiation of the blood and the fifth because of the vitiation of all the three Doshas together. Chancre is known as Updansha in Ayurveda.

Chancre is characterised by pain as if the affected part (generally the male organ or the outer vagina) is being pierced by a needle. Eruptions like small boils appear which exude pus of a pale yellow colour. In Upadansha born out of the vitiation of blood there may be exudation of blood from the affected part. The variety of chancre caused by the vitiation of all the three Doshas of the body is generally incurable.

The boils, when they burst, give rise to wounds with sharply defined edges. The affection spreads to glans penis and the prepuce in the males and the labia minora and clitoris in the females. There is also a feeling of itching and even in a mild form there is inflammation and the parts are tender to the touch.

Treatment: The following medicines are indicated in cases of chancre:

1.	Rasamanikya	120 mg.	To be given twice daily with decoction of neem leaves
	Varadadi Guggul	1½ gm.	
	Chopchina Churna	1½ gm.	
2.	Chopchinadi Paka	12 gm.	To be given once at breakfast time with milk
3.	Sarivadyasava	12 ml.	With water after meals twice daily.
	Rasashekhar	240 mg.	At bed time with water

Bhairava Ratnavali is the best remedy for chancre. It should be given in doses of 900 mg. daily for three days and 300 mg. for the next 11 days. The total intake should be about 5.1 grammes in 14 days, The maximum allowed is 7.5 grammes of the medicine throughout the course of the treatment. The medicine must be given in a capsule because its direct oral administration may lead to eruptions in the mouth.

The affected parts should be washed with decoction of neem leaves and properly dried. Washing them with milk and using hot water for cleaning the parts is also helpful.

Diet: The dietary regimen is the same as has been recommended for patients suffering from syphilis.

GONORRHOEA

Symptoms and Causes: Gonorrhoea, or Ushnavata as it is known in Ayurveda, is an inflammatory disease affecting especially the mucous membrane of the urethra in the male and that of the vagina in the female, but spreading to other parts of the body.

The disease is directly contagious from another

person already suffering for it, usually by sexual intercourse, but occasionally it is conveyed by the discharge on towels or clothing as well as by actual contact.

In men, the disease shows itself in the irritation of the urethra, scalding pain on passing urine and a viscid yellowish-white discharge. The glands in the groin often enlarge and may suppurate. The urine contains yellowish threads of pus visible to the naked eye. When the disease continues for some time, inflammation in the neighbouring organs may appear, the testicles, prostate gland and the bladder being affected. At a still later stage the inflammation of the urethra is apt to lead to formation of fibrous tissue around this channel leading to narrowing and great difficulty in passing urine. The infection may spread to the various joints of the body making them stiff and, occasionally, there is general blood poisoning with inflammation of the heart valves and abscesses in various parts of the body. It may also cause a severe form of conjunctivitis and in newly born children it may lead to total blindness

In the females the course and complications of the disease are somewhat different. It begins with a yellow vaginal discharge, pain on passing urine and very often inflammation of the glands situated close to the vulva (the mouth of the vagina). The most serious thing is that the inflammation may spread to the uterus, the Fallopian tubes and the ovaries, causing permanent damage. Occasionally it may lead to peritonitis (inflammation of the enveloping membrane of the abdomen) with fatal results. Many cases of conitnued ill-health and even sterility and recurring miscarriages are due to these changes.

Treatment: The following medicines are recommended:

1.	Puyamehantaka Rasa Raladi Churna	1 gm. 3 gm.	To be given thrice daily with water or with water with which a little unboiled fresh milk is added
2.	Chandanadi Vati	½ gm.	To be given in two hourly doses alongwith the medicine prescribed above
3.	Shatapatryadi Churna	4 gm.	In a single dose at night with warmed up milk of cow

The medicines prescribed for dysuria are also effective in gonorrhoea, but the following regimen must be followed:

Regimen: The patient should be given complete rest. Riding horses or other forms of transport, particularly in which the posterior comes in contact with a hard seat, is prohibited as is any discussion or thinking of sex. Hip baths in warm water are indicated. Diuretics and laxatives in case of constipation are also indicated. The fluid intake should be increased with water mixed with a little milk being the chief drink. Along with the oral medication, local applications are advised. The urethra should be flushed with a solution of potassium permangnate (1:3,000) with the help of a syringe. The syringe may be kept in the urethra for five minutes before its contents being allowed to come out.

GYNAECOLOGICAL DISORDERS

We shall now come to the diseases which are peculiar to females. Of them, the chief disorders are connected with menstruation, discharge of white liquid laced with pus (leucorrhoea or the whites), diseases connected with pregnancy and child birth, prolypse of the uterus and infertility and frigidity. We shall first take the disorders connected with the menstrual periods.

Menstruation is a periodic change occuring in human beings (and also some higher apes) consisting of discharge of blood from the cavity of the womb. It occurs between 12 and 13 years in warm climates and later in cold regions. The duration of each menstrual period varies from 2 to 8 days and there is an interval of 21 to 28 days between the two periods. The menstrual flow stops when a woman becomes pregnant and stops completely at the age of 44 or 50 years when it is known as the menopause or the grand climacteric.

The two main disorders of menstruation are: (i) absence of periods, or scanty and painful discharge, for which terms like amenorrhoea and dysmenorrhoea are applied and (ii) profuse bleeding during the periods (menorrhagia) or irregularly (metrorrhagia)

Symptoms: Amenorrhoea (scanty discharge of menstrual blood) may be due to anaemia or general ill health or due to certain serious diseases like TB, aggravated dyspepsia and Bright's disease, malaria etc. of a prolonged nature.

Dysmenorrhoea is characterised by pain like that of a colic and there is also prostration and vomiting. If the pain precedes the menstrual period, it is due to irritation in the ovary and is generally accompanied by pain in the groin.

Another cause of dysmenorrhoea is inflammation of the various internal ogans like the womb, the ovaries or the Fallopian tubes. Sometimes, the disorder is due to nervous causes, in which case there are spasms of pain.

In cases of scanty discharge of menstrual blood, the main cause should be diagnosed and removed. If it is due to anaemia, the treatment for anaemia is a prerequisite to the treatment of amenorrhoea. Aggravated dyspepsia, prolonged malaria or Bright's disease should be treated first in case they have given rise to scanty and painful discharge of amenorrhoea. In unspecified cases, or where the exact cause is not known, general tonics and remedies for improving the health of the patient should be administered.

Treatment: Ayurveda prescribes the following medicines in cases of amenorrhoea and dysmenorrhoea, called Nashtartava and Kashtartava respectively:

Rajahpravartini Vati 500 mg, Voladi Vati 500 mg. or Nashtapushpantaka Rasa 500 mg. should be administered with a decoction made of black sesame, leaves of lasora and gur. In addition, Kumaryasava 20 ml. should be given with 240 mg. of Shuddha Tankana two times in the day, preferably after meals.

Another helpful remedy is: a decoction of 18 gm. of root of cotton tree, Telia Geru 6 grammes, leaves of rose bush 6 grammes, root of Chaulai 6 grammes, and gur 24 grammes with 750 ml. of water. The decoction should be allowed to boil till one-eighth is left. It should be given once daily for three days.

Hashish (prepared from ganja) taken in 30 mg. doses twice daily helps relieve the condition. 120 mg. of the drug kept in the vagina helps relieve the pain of amenorrhoea and dysmenorrhoea.

MENORRHAGIA AND METRORRHAGIA

Excessive discharge of blood during the monthly periods may be, to a certain extent, caused by the same factors which produce amenorrhoea. This condition is known as menorrhagia but when there is bleeding at irregular intervals it is termed as metrorrhagia. The treatment for both the conditions is the same.

In Ayurveda, the conditions are called Rakta Pradara. They may be due to the imbalance of the harmones, which is caused by the aggravation of Pitta in the body. Abnormal growths in the uterus or other organs may also produce profuse bleeding. If bleeding continues for a long time, there may be giddiness, headache, pain in the calves and restlessness, the common concomitants of anaemia. Menstruation may start with pain in the abdomen, the back or the hips, the flow may be excessive, leaving the patient extremely weak.

Treatment: Ashoka (*saraca indica*) and lodhra (*symplocos racemosa*) are the two drugs of choice in the treatment of this condition. Preparations like Ashokarishta and Lodrasava are widely prescribed. Tender leaves of the pomegranate tree (seven in number) and seven grains of rice ground into a paste given to a patient for a month (twice daily) act both as a curative as well as a preventive medicine for this condition. Praval Pishti in doses of one grain each is given four times a day.

Other prescriptions for the treatment of menorrhagia and metrorrhagia are given below:

1.	Pradararipu Rasa	240 mg.	To be taken twice
	Bol Parpati	240 mg.	daily with honey
	Chandanadi Churna	1 gm.	

2.	Pradarantaka Lauha Chandraprabha Pushyanuga Churna	240 mg. 500 mg. 1 gm.	To be given morning and evening with decoction of Kusha grass

Regimen: The patient should be given complete bed rest. Any form of strain is to be avoided. Worry and anger also tend to aggravate the condition and the patient should be kept in pleasant surroundings. The foot of the bed should be slightly raised and no pillow should be used. Hot and spicy foods should be avoided; sugarcane juice, grapes, banana, pomegranate are particularly useful in this condition. Sexual intercourse should be prohibited.

LEUCORRHOEA

Symptoms: Leucorrhoea, or whites, called Shweta Pradara in Ayurveda, is a condition in which there is a whitish discharge from the female genitals. It may be thick and viscid and foul smelling (if it is caused by some infection). Some harmonal and metabolic disorders are also responsible for the condition, in addition to infection.

Ayurveda considers it to be caused by the vitiation of Kapha; it occurs commonly among weak, emaciated and anaemic women. Inflammation of the womb following on childbirth, displacement of the uterus or gonorrhoea. Among young females, the trouble may be due to thread worms, as the result of general debility combined with lack of cleanliness or infections.

In addition to the whitish discharge from the vaginal tract, there is weakness, pain in the lumber region and the calves. Excess of bile is also present along with constipation. There appears to be a direct

relationship of this disease with a nervous temperament. In a chronic form, leucorrhoea causes irritability of temper. The patient develops black patches under the eyes. Late nights precipitate the attack of the malady.

Treatment: A proper diagnosis of the disease must be made and the cause removed. In addition to the medicines prescribed below, a regular douching of the genital tract with a decoction of the bark of the banyan tree or the fig tree is very helpful. A tablespoonful each of the powders of the bark of the two trees should be boiled in a litre of water till it is reduced to about half. Douching with the lukewarm decoction keeps the tissues of the vaginal tract healthy. The medicine of choice for this condition is, of course, Pradarantaka Lauha, a compound of some calxes, of which that of iron is the most important. Kumari (*aloe vera*) is another wonderful remedy for the condition: it tones up the tissues of the uterus and prevents the exudation of any abnormal fluids. Lodhra (*symplocos racemosa*) bark is another substance the decoction of which can be used for douching the vaginal tract of a leucorrhoea patient. Alum (called Tankan) is also one of the drugs used in leucorrhoea. A proper course of treatment for the malady should be:

1.	Pradarantaka Lauha Chandraprabha Pushpanuga Churna	240 mg. 500 mg. 1 gm.	To be taken morning and evening with decoction of root of the kusha grass
2.	Yamani Shadava	4 gm.	To be taken twice daily
3.	Ashokarishta	20 ml.	Twice daily along-with medicine No. 2 above

Alternatively, the following prescription should be advised:

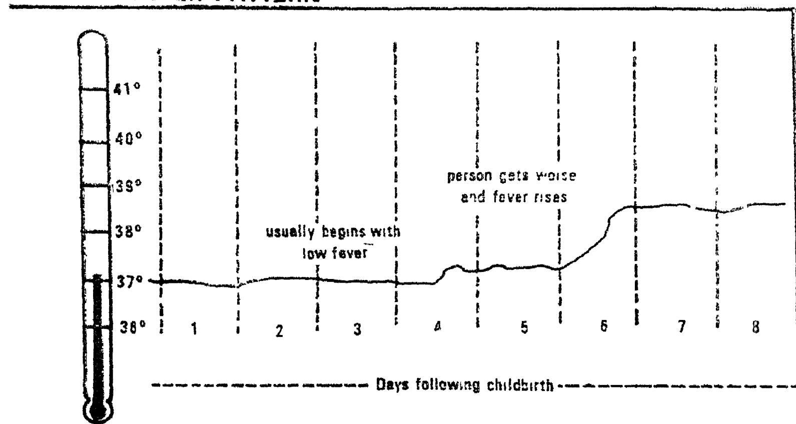
1.	Kukkutanda Twakbhasma	240 mg.	To be taken in the morning and evening with honey
	Yashada Bhasma	120 mg.	
	Powder of Amlaki	500 mg.	
2.	Chandraprabha	500 mg.	To be taken at mid-day and night with warm water
	Triphala Powder	3 gm.	
3.	Darukadi Churna	6 gm.	May be taken last thing at night with cow's milk

In patients suffering from neurasthenia alongwith leucorrhoea Ratnaprabha Vatika should be given in 120 mg. doses in the morning and evening.

Diet: A strict dietary regimen is necessary for the patient. Fried and spicy foods are to be avoided, as are pickles and other savouries. The patient should be encouraged to chew betel nut (supari) after meals: it has a curative effect and also prevents the development of the disease. The patient should avoid worry and mental strain of all kinds. Late nights and sexual intercourse is to be avoided. A brisk walk early in the morning is helpful.

CHILD-BIRTH FEVER

Causes and Symptoms: Child-birth fever, Pra suti Jwara, also called Peurperal fever, was at one time—and in the poorer sections of society still is—one of the premier reasons for mortality among the mothers. Of all the maladies and disorders that a woman is subject to after she has given birth to a child, this



fever is the most common. It is of various types and grades of severity. After the birth of the child, the mother is specially liable, for several reasons, to contract any infectious disease to which she may be exposed. In the first place she is much weakened by strain through which she has passed, and often by the loss of a great quantity of blood. In the second place, the injuries incidental to child-birth produce raw surfaces in the genital tract from which absorption occurs with great facility.

The symptoms of peurperal fever appear generally on the second or third day after labour, the first three days being regarded as critical in recovery. There is general discomfort and feverishness, rise of temperature, quickening of the pulse and pain in the lumber region. Inflammation of the pelvic region may also be present in some cases. The fever may rise further and if the infection is not checked, peritonitis may set in,

leading in some cases to a most serious condition known as septicaemia (or general blood poisoning). In some cases, the symptoms may not be checked and death may occur because of the involvement of the heart.

In case the temperature goes beyond 103° F. cold compresses should be applied to reduce it. If the patient is very weak and complains of dizziness blood transfusion should be undertaken.

Treatment: Some Ayurvedic physicians recommend the use of antibiotics alongwith the Ayurvedic preparations in order to control the fever. The following Ayurvedic remedies are recommended:

1.	Prataplankeshwar Rasa	240 mg.	To be given thrice daily with juice of ginger and honey
	Sanjivani	120 mg.	
	Shuddha Tankan	120 mg.	
2.	Devadarbadi Quath	58 mg.	One dose in the morning
3.	Saubhagya Vati	240 ml.	Two doses in the day
4.	Dashmularishta	20 ml.	To be given after the medicine No. 3 above, with water

If the fever is very high, Shri Jaimangal Rasa should be given in place of Sanjivani at No. 1 above. If the fever has continued for some days in spite of medication, Putpakwavishamjwarantaka Lauha, Vasantmalati may be given in doses indicated above.

Regimen: Clean, healthy surroundings are a must for a woman suffering from child-bed fever. She must be given *nutritious* but easy to digest foods. Milk sweatened with sugar should be the mainstay of her

diet. Sour and astringent substances should be avoided. Complete rest is indicated. Her genitals must be properly douched with a weak solution of potassium permangnate to keep them clean.

DISPLACEMENT OF THE UTERUS

Causes and Symptoms: Of the other disorders of the female genitalia, the displacement of the uterus or the womb (Yoni Vyapagata) is probably the most disturbing The uterus is slung in the pelvic cavity and has freedom of movement backwards and forwards and also upwards and downwards. In most cases, its displacement is downwards in which case it is known as prolapse. In this condition, the uterus slips downwards in the space between the bowel and the bladder. In very serious cases, it may actually protrude from the vagina. The condition generally comes on in older women, usually those who are becoming stout, have a considerable amount of work to do, and have in child-birth suffered laceration of the parts that should support the uterus.

Prolapse of the uterus is one of the twenty Yoni Vyapgatas described by Charak, Sushruta and Vagbhatta One of the acharyas, Madhava, has categorised these disorders as five belonging to the class of diseases produced by vitiation of Vayu, five because of Pitta vitiation, five due to vitiation of Kapha and the rest caused by the vitiation of all the three Doshas. Prolapse of the uterus is a condition which is caused, among other things, by the vitiation of all the three Doshas of the body and is not easy to deal with.

Treatment: The acharyas have advised that medicines prescribed for disorders of the female genitals may be tried as under:

1.	Vachadi Churna Prasanna	3 gm. 24 ml.	They may be mixed and fried in about 5 grammes of ghee and given once daily
2.	Rajahpravartani Vati or Bolaadi Vati or Rajodoshahari Vatı	240 mg.	To be given thrice daily

When the condition has improved a little bit, tonics like calcxes of gold, silver or copper should be administered. Exercise designed to bring the uterus into its normal shape should be tried. The patient must be allowed to rest, her movements should be restricted and lifting of weights or vigorous work prohibited as it is likely to aggravate the condition.

In some intractable cases, surgical interference may become inevitable to repaır the damage to the parts that hold the uterus in its proper place.

STERILITY

Sterility, Vandhyatva, may be defined as: (i) among the females, the inability to conceive; and (ii) among the males, the failure or incapacity to impregnate the female. The failure to reproduce—to give a broad definition of sterility—must be distinguished from frigidity among the females and impotence (failure to perform the sex act or to perform it imperfectly) among the males. A female conceives when the sperm of the male injected into the vagina during the sexual intercourse travels to the uterus and joins with the ova secreted by the ovaries. If this union fails to come off, the woman may be taken to be sterıle. And if the seminal fluid of the male does not contain the sperms

needed to impregnate the ova he is said to be sterile. We shall deal with the two conditions separately.

According to ancient Ayurvedic texts, the causes of sterility are: (1) defective sperms or ova; (2) congestion of the ovaries or the ducts which carry the sperm; (3) truama sustained by the genital organs: (4) functional disorders of the reproductive organs; (5) congenital defects in those organs; (6) deformities resulting from injuries or certain diseases like syphilis or gonorrhoea; and (7) imperfect development of the reproductive organs.

Among the Females: Sterility among the females may be caused by certain congenital deformities such as clogged mouth of the uterus, either congenital or caused by an inflammation, displacement of the uterus, inflammation of the mouth of the womb, anaemia and other weakening diseases, malnutrition, blood poisoning, etc.

Congenital or organic defects in the reproductive organs can be cured only through surgical interference but if sterility is due to functional causes it is easy to cure. The vitiation of the various Doshas—Vata, Pitta and Kapha (any one of them or all the three together)—is likely to lead to sterility. The condition is known a s Vandhyatva.

Remedies: The most effective remedy for sterility among the females is Phala Ghrita. It should be given in doses of two teaspoonfuls each twice daily, preferably on an empty stomach, with milk. Another drug of choice is Vanga Bhasma. It should be given in doses of two grains each twice daily with honey.

Silajatu is another effective drug in the treatment of this condition: it should be given in doses of one tea-

spoonful twice daily.

Bala (*sida rhombifolia*) is used both internally and locally for the treatment of sterility. The root of this plant is boiled in milk and oil. It is used with lukewarm water as a douche. It removes the defects in the mucous membrane of the genital tract which inhibit the effective union of the sperm with the ova in the uterus. The medicated oil is given to the sufferer with a cup of milk in the morning in a dose of one teaspoonful.

The above medicines are to be administered after the physician is sure that the failure to conceive on the part of the woman is due to some defect in her genital organs. The best course is to ensure that the husband is not sterile: it can be done through an examination of his sperm under a microscope. Generally it is found that 35% of the cases of sterility are due to weak or defective sperms. If that is the case it is the male partner who should be treated first.

Excessive fat often inhibits conception. Obesity must, in that case, be treated first through regulation of diet and a regimen of slimming exercises.

Diet: A woman under treatment for sterility must be advised to desist from alkaline and pungent foods. Fruits and sweet substances should be consumed in larger quantities. The diet should be adequate to meet all the needs of the body. It must contain sufficient proteins.

Among the Males: Sterility among the males is the result of (i) absence of sperm in the semen—a condition called azoospermia or (ii) paucity of the sperms (oligospermia).

Sterility among the males may be caused—as in the case of the females—by prolonged illness, certain

venereal diseases, injuries or congenital deformities. For example, if there is a malfunctioning of the ductless glands which secrete the harmones responsible for the regulation of the sperm, infertility or failure to procreate would definitely result.

It is necessary here to stress that sterility among the males should not be confused with impotence. The former is the incapacity to reproduce, whereas the latter is the failure to perform the sexual act. An impotent man may become the father of many children because even his incapacity to complete the coitus may not deter the emission of sperms which may unite with the ova to form the foetus.

If there is a complete lack of sperms in the semen —the condition termed as azoospermia—it is not an easy malady to cure. But if the sperms are present, but are too few in number to be effective (oligospermia) there is not much difficulty in handling the condition.

Remedies Asvagandha (*withania somnifera*) is the drug of choice for male infertility. The fresh root of this wild plant smells like the urine of a horse, hence the name Asvagandha (literally, the smell of the horse) When dried the smell disappears and it can be taken without any difficulty. The powder of the dried root of the plant is taken in doses of one teaspoonful each twice daily with milk. Alternatively, it may be boiled with milk and sugar may be added to it. It is, in that case, turned into a linctus and a teaspoonful of it can be taken twice daily followed by milk. Another preparation Asvagandharishta (the basic ingredients being aswagandha and alcohol) may be given in doses of two ounces each after meals.

Another useful remedy is Kapi Kacchu (*mucuna pruriens*) which is prescribed for male sterility. The seeds outside the pods of this wild growing creeper are

powdered after being roasted and a teaspoonful of the powder is administered twice daily with a cup of milk.

But the most celebrated of the remedies for sterility in Ayurveda is Makaradhwaja. Two grains given to the patient on an empty stomach with half a teaspoonful of butter and half a teaspoonful of sugar has a miraculous effect.

In addition, all the drugs prescribed for impotence are helpful in dealing with male sterility. But aphrodisiacs—drugs which stimulate the sex—should be taken in proper quantities.

Diet: The patient should be advised to desist from sour and pungent substances as they have a deleterious effect on the production of sperms. Milk, ghee, butter and sweet substances are good for this condition. High protein diet, particularly fish, white flesh and eggs, is recommended. A man under treatment for sterility should avoid over-indulgence in sex.

IMPOTENCE

Causes and Symptoms: Impotence or Klaivya is a disease peculiar to males; in females the corresponding disorder is known as frigidity. Impotence can be defined as the inability to perform the sexual act or even incomplete performance which leaves the female partner partially or totally dissatisfied. Impotence may be partial or total, temporary or permanent. But the most satisfactory classification of the disorder is: (1) organic; and (2) functional. Among organic causes are lesions of the external genitalis, e.g., a tight foreskin; disturbances of the endocrine glands, such as diminished activity of the gonads, thyroid gland or the pituitary gland; diseases of the central nervous system, e.g , tabes dorsalis (locomotor ataxia, or the disordered

and disjointed movement of the limbs, due to lack of coordination), any severe disturbance of health, such as diabetes mellitus, addiction to alcohol and the like; among the psychological factors are ignorance, fear, weakness of sexual desire etc.

In Ayurveda the condition is known as Klaivya. It may be caused by the vitiation of any of the three Doshas of the body, i.e., Vata, Pitta and Kapha or a combination of all the three.

It has been found that about seventy per cent of the males complaining of the incapacity to perform the sex act suffer from psychological impotence. They may be suffering from a guilt complex because of having indulged in masturbation in their childhood and adolescence, or they may be feeling guilty because they have been having unnatural sex. Some of them may be in a perennially excited state because of thinking all the time about having sex and the moment they get an opportunity they ejaculate even before they have reached a state of physical readiness or before the commencement of the act. Real (physical or organic) impotence is rather rare.

Sushruta and Charak have categorised impotent males according to the perversion that excites them to sexual activity. Sushruta has described Aasekya (who is excited on licking the semen), Saugandhika (who is excited when he smells the vagina), Kumbhika (who is excited only when he is the passive partner in anal sex), and Irshyaka (one who is excited when he watches another performing the sex act—voyeur). Charaka has similarly classified impotent males according to their peculiar preferences.

Treatment: In the case of organic impotence, such as a tight foreskin, surgery is the only recourse open to

a physician. If the failure to perform is psychological, a proper explanation of the facts of life to the patient would help.

In Ayurveda, Vajikarana (aphrodiasics) has been developed from the earliest times to deal with cases of seminal weakness or impotence. Drugs prescribed for sterility would definitely help. A high protein diet is an essential part of Vajikarana. Fish, eggs, testicles of the goat, partrige meat, eggs of a crocodile, urad dal, butter, ghee, etc. are specially recommended for impotency.

The popular medicines used in the treatment of this condition according to *Bhishkarma Siddhi*, a popular treatise on Ayurvedic medicine, are Apatyakara Swarasa, Kamalakshadi Churna, Vanari Gutika, Shri Madananda Modaka, Mahachandanadi Taila, Mrit-sanjivani Sura, Virya Stambha Vati, Chandrodaya Rasa and Makaradhwaja.

The medicines must, of course, be taken under the guidance of a qualified Ayurvedic physician as their indiscriminate use may lead to over-indulgence which may, in the final analysis, prove to be more harmful than the condition to cure which they have been taken.

FRIGIDITY

Symptoms and Causes: Frigidity (literally coldness) is a peculiarly female disorder. A normal woman has a normal desire for sex. When the desire is absent or is feeble, or there is an antipathy towards the sexual act, the woman is said to be frigid.

Frigidity may be due to organic reasons or it may be functional. Among the organic reasons are the diseases of the genital organs which inhibit the desire for sex. Prolapse of the uterus or other abnormalities

of the female genitalia can lead to a dimunition of the desire for the sexual act. Frigidity may be caused by a trauma, e.g., by rape or submission unwillingly to a person under some form of coercion. Inexpert handling by the male partner may also lead to frigidity.

Treatment: In case frigidity is functional or born of psychological reasons, a psychological approach is the best way to deal with it. The patient must be taken into confidence and the facts of life explained to her. Sometimes frigidity may be due to cultural reasons, i.e., the woman may feel that it is sinful to think of sexual union. This is, not infrequently, the case in our country where religious beliefs persuade women to suppress their natural urge for sex.

If the malady can be traced to any physical causes, they must be removed first before any improvement can be expected. If it is due to psychological reasons a psychological approach is the best.

In other cases, aphrodiasics can be helpful.

7

SOME OTHER DISEASES

DIABETES

Symptoms and Causes: A serious disorder of the glands, of pancreas to be exact, is diabetes, or Madhumeha to give it its Ayurvedic name. It is one of the Pramehas. It is one of the most insidious disorders of the metabolism and, if left undiagnosed or untreated, it may lead to rapid emaciation and ultimately death. It generally runs in the families and people with a defective diet are more susceptible to it than others. People whose diet consists mainly of carbohydrates, who are fat and who lead a sedentary life are more prone to fall a victim to it than others.

Diabetes is of two types: (1) diabetes insipidus and (2) diabetes mellitus. The first variety is characterised by excessive thirst and the passing of large volumes of urine which has a low specific gravity, but contains no abnormal constituents. It is due to lack of diminution of the anti-diuretic harmone normally produced by the pituitary gland. The condition may be hereditary or due to some infection, such as inflammation, a tumour or syphilis, involving the base of the brain.

The more common disorder is of the second variety, namely, diabetes mellitus. It is a constitutional disorder caused by the malfunctioning of the pancreas which produce insulin. The substance discovered by the practitioners of allopathy at the end of the last century and produced in the laboratories a couple of decades

later, is responsible for the assimilation of sugar into the system. Sugar accumulates in the blood and the urine and is not converted into energy for the muscles and the tissues. The onset of the disease is gradual and somtimes, it is too late before it is checked. The first symptoms are failure of strength and loss of weight. The urine output goes up from its normal quantity of two to three pints to ten or twenty in 24 hours. The sugar passed through the urine may increase to a pound or even more. The amount of sugar in the blood increases after a meal instead of its being absorbed into the system. A troublesome symptom is the excessive thirst to quench which the patient takes more and more liquids and passes more and more urine, leading to loss of sugar which should have been assimilated into the system. There is also a voracious appetite, but in spite of the large amounts of food that he takes he goes on losing strength and weight. Poor vitality of the tissues caused by the lack of absorption of sugar leads to various skin eruptions. There is a serious itch in the groins and eczema of the various parts of the body. Sometimes, there is a tendency of gangrene in the lower extremities and any injury sustained by the patient is difficult to heal.

Diabetes, as a rule, advances comparatively slowly except in the case of young people, in whom its progress is likely to be very rapid. The younger the patient, the more swift is the course of the disease. Dimness of vision, cataract, weakness and pains in the limbs, inflammatory chest infections, of which pulmonary tuberculosis is the most serious, may develop. Occasionally death occurs due to exhaustion or from the condition known as diabetic coma.

Treatment: The first step in the treatment of dia-

betes, once it is confirmed through an examination of the urine and blood of the patient, is the restriction of diet of the patient. All sugary substances and those containing any percentage of carbohydrate should be banned. Sugar in any form, rice, potatoes, sweat fruits (except rose apple—Jamun), refined wheat flour should be given up. Fat intake should also be reduced, particularly that of ghee or butter. A little oil may be taken without any harm. Vegetables like Karela (bitter gourd) drumstick and Bimbi are particularly recommended. Bitter gourd has a medicinal property of helping to assimilate carbohydrates into the system. An age-old nostrum of taking two tender leaves of Neem and Bilva each on an empty stomach in the morning has been found helpful in reducing the blood sugar. Rose apple (Jamun) is another fruit which controls diabetes.

The second step before medication starts for a diabetes patient is to control the amount of food that he takes. If he is overweight, a strict regimen of diet should be initiated to bring down his body weight. Juice of the leaves of the bitter gourd plant and its fruit should be administred in doses of one ounce twice daily, preferably on an empty stomach. Seeds of Karela may be ground and taken with food. Shilajit, or mineral pitch, is another medicine which has an anti-diabetic effect.

A standard Ayurvedic preparation, Vasanta Kusumakara, is particularly favoured by the practitioners. Two grains of the preparation are mixed with half a teaspoon of cream and one fourth teaspoon of sugar and given twice daily on an empty stomach. Other remedies are:

1.	Chandraprabha Vati	500 mg.	The medicine should be mixed with juice of Karela or stone of rose apple and given thrice daily
2.	Shilajita Nyagrodadhi Churna	240 mg. 3 gm.	These should be given twice after meals with decoction of arni
3.	Vasantakusumakara Rasa Shuddha Shilajit	120 mg. 240 mg.	Twice daily with powder of rose apple stones
4.	Nag Bhasma Haldi Amalaki Churna	120 mg. 500 mg 500 mg.	Twice daily with honey

A diabetic should be asked to take light exercise and should not sleep during the day. A yogic exercise, Matsyendrasana is particularly useful in checking the severity of the disease. The sufferer should be careful in avoiding injuries because the inability of his system to absorb sugar reduces his capacity to heal a wound. The slow healing process may even lead to gangrene of the affected part.

HYSTERIA

Symptoms and Causes: Hysteria—Yoshapasmara in Ayurveda—manifests itself by overaction of some parts of the nervous system. There are convulsive seizures, spasms and contractions of the limbs, paralysis, loss of sensation over areas of the body, and affections of the various internal organs. Most of the symptoms are the result of auto-suggestion and are readily relieved by

suggestion from another person.

The condition is far more common among women than in men. Heredity is most important and Latin races are more subject to the malady than others. Faulty upbringing during childhood predisposes a person to hysteria, which in young women of unequally developed mind and pampered habits, may be produced by sudden fright, family worries, grief or a love affair. Mental changes occur among the victims of hysteria. They become whimsical, dominated by certain pet ideas, and unable for the same work and concentration as before. They become more excitable and hypersensitive. A patient may become morally unhinged, deceiving everyone around her, so that little credence can be given to her statement.

Convulsive hysteria is the most marked form. An attack may begin upon some excitement, with laughter or weeping, or may give no warning wign. The victim falls in a semi-conscious or unconscious condition. The difference between an epileptic fit and a hysterical fit is that whereas the victim of epilepsy falls down suddenly injuring himself, a hysterial patient would gently subside into a chair or on the floor. She would moan, move her head from side to side and roll her eyes. In this stage she may see visions and exhibit powerful emotions of fear, ecstasy or joy. Loss of sensation in some parts of the body is often noticed. In some cases it may even resemble paralysis. The other manifestations are spasms and contractions of the muscles leading to some deformity if the muscles are too tightly pulled during a fit.

The paralysis accompanying hysteria is generally of a psychological origin, passing off if the attention is strongly diverted or somebody is able to mentally affect the patient. In some cases, the muscles of the larynx

become paralysed and the victim may go about like a mute person for years before some powerful influence forces her to exert her will and the organ of voice again comes into play.

The malady affects only people with weak will power, given to fantasies of suffering. There may be, in some cases, some changes that take place in the internal organs of the body. Constant hiccup, barking noises, excessive vomiting, diarrhoea, absolute loss of appetite and profound changes in blood circulation may take place. A joint, especially the hip or the knee, may become swollen, stiff and painful and may remain so for months.

Treatment: Hysteria, according to Ayurveda, is another form of epilepsy. It is called Yoshapasmara among women or Apatamraka generally and can be treated by following the same regimen of medication as has been indicated for epilepsy.

Persons subject to hysterial fits should be tactfully but firmly handled. They should not be allowed to while away their time in useless pursuits. Enough work to occupy them should be provided to them, and most important of all, they should not be pampered. They should be exhorted to stiffen their power of resistance and told that there is nothing wrong with them. Techniques of suggestion should be applied to bring them to full recovery. Persuation, or pscho-analysis or education and employment are the watchwords in the treatment of hysteria.

ECZEMA

Symptoms and Causes: Eczema or Vicharchika in Ayurveda, is a superficial disease of the skin of an inflamatory nature, characterised by a scaly and fissured

condition of the cuticle and a sticky watery discharge, and associated with itching or even pain. The condition is very important because it is said to embrace about one-half of all the cases of skin disease. It is more often called by the more general term of 'dermatitis' or inflammation of the skin.

Vicharchika, according to Ayurveda, is a minor form of leprosy and is caused by the aggravation of Kapha in addition to Vata and Pitta.

Treatment: The following specific remedies are recommended, even though the medicines indicated in severe forms of leprosy would undoubtedly help in ameliorating the condition of the patient.

1.

Udaya Bhaskara	120 mg.	To be taken thrice daily with Khadiradirishta
Paribhadra Rasa	240 mg.	
Chakramardabija Churna	240 mg.	

2. The root of Kasaundi should be ground and mixed with Kanji and used as ungent. Alternatively, leaves of Amaltas and their juice should be rubbed over the affected parts. The white patches of

LEUCODERMA

Symptoms and Causes: Literally white skin, leucoderma is a condition in which white patches appear on the skin. Kilas, according to Ayurveda, is a condition in which there is localised loss of pigmentation of the skin. It is caused by some morbidity of the liver which results in a deficiency of Pitta.

Treatment: There are certain predisposing factors in leucoderma: persons suffering from chronic dysentery

and other digestive disorders are more prone to it than others. If a patient of leucoderma is found to be suffering from digestive disorders, they should be treated first. Kutaja (*holarrhena antidysenterica*) seems to be the drug of choice in this condition. Powder of the bark of the plant should be given in one teaspoonful doses thrice daily to correct the condition. Arogyavardhini Vati is another useful medicine: the normal dose is four tablets given thrice daily (making a total of 12 per 24 hours). Bhallataka (*semecarpus anacardium*) is also helpful in treating this condition. A linctus prepared from the drug is given in one teaspoonful doses thrice daily. The side effects that the drug is likely to have can be warded off by swallowing a little ghee or butter before ingesting the drug. It should be followed by a glass of milk.

The following prescriptions are specially recommended for the Kilas patients.

1.	Rasa Manikya	60 mg.	To be given thrice daily
	Shashilekha Vati	240 mg.	
	Vakuchi Taila	4 ml.	
	Honey	4 ml.	
2.	Decoction of Khadira and Amalaki	58 ml.	One dose to be taken in the morning
3.	Shweta Gunjadi Taila should be applied on the affected parts		

Diet: The patient should be kept on a salt-free diet as the absence of salt in the diet will speed up the recovery. Only rock salt is advised and that too in small quantities. Vegetables with a bitter taste like bitter gourd are beneficial.

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